

DOCUMENT RESUME

ED 372 304

CE 067 003

AUTHOR Romero, Carol J.
TITLE JTPA Programs and Adult Women on Welfare: Using Training To Raise AFDC Recipients above Poverty. Research Report No. 93-01.
INSTITUTION National Commission for Employment Policy (DOL), Washington, D.C.
PUB DATE Jun 94
NOTE 125p.; For a related document, see CE 066 684.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS Demonstration Programs; Educational Legislation; *Employment Programs; Federal Legislation; Federal Programs; *Females; *Job Training; *Poverty Programs; *Program Effectiveness; Tables (Data); *Welfare Recipients
IDENTIFIERS *Job Training Partnership Act 1982 Title IIA

ABSTRACT

A study examined the effectiveness of programs funded under Title II-A of the Job Training Partnership Act (JTPA) in raising female recipients of Aid to Families with Dependent Children (AFDC) above poverty. Data about the employment/earnings outcomes of nearly 6,500 women from 150 JTPA service delivery areas in 11 states who participated in a JTPA program during program year 1986 were analyzed statistically. The JTPA system resulted in job placements for three-fourths of those AFDC/JTPA participants who had not worked for at least 1 year before enrolling in JTPA programs. Both job placement and occupational classroom training (OCT) were generally effective for AFDC/JTPA participants; however, younger African-American participants and school dropouts benefited more from on-the-job training, whereas graduates benefited more from OCT. Of those AFDC recipients placed by JTPA, 16% and 22% were above poverty in their first and second post-program years, respectively. A combination of services customized to individual needs proved most effective in helping AFDC recipients achieve economic self-sufficiency. (Fourteen figures/tables and 35 references are included. Appended are research findings from welfare demonstration projects; definitions of variables used in the multivariate models; and 23 tables summarizing the logit and post-program employment and poverty threshold models analyzed.) (MN)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

JTPA PROGRAMS AND ADULT WOMEN ON WELFARE: USING TRAINING TO RAISE AFDC RECIPIENTS ABOVE POVERTY

by
Carol J. Romero



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
☐ This document has been reproduced as
received from the person or organization
originating it.
☐ Minor changes have been made to improve
reproduction quality.
• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

Research Report No. 93-01

June 1994

National Commission for Employment Policy
1522 K Street, N.W. — Suite 300
Washington, D.C. 20005

**JTPA PROGRAMS AND ADULT WOMEN ON
WELFARE: USING TRAINING TO RAISE
AFDC RECIPIENTS ABOVE POVERTY**

by
Carol J. Romero

Research Report No. 93-01

June 1994

**National Commission for Employment Policy
1522 K Street, N.W. — Suite 300
Washington, D.C. 20005**

Preface

"Ending welfare as we know it," became a part of the American political lexicon in 1992 when then-candidate Bill Clinton proposed to reform the publicly funded family assistance program during his Presidential campaign. Welfare reform—long a subject of debate in local communities, at the state level, in the White House and on both sides of the aisle in Congress—has become a universal political objective. The Clinton initiative to change Aid to Families with Dependent Children (AFDC) has been popularly defined by the phrase "two years and out," which recasts welfare as a temporary and transitional program of financial support to be utilized by recipients only until they are able to find financially viable employment. Two years has been proposed as an optimal time limit on benefits to reduce long-term welfare dependency: about half of all 4.5 million welfare recipients receive aid for more than two years.

Even as the federal government grapples with the enormous task of nation-wide welfare reform, states are implementing their own plans. To reduce the number of welfare recipients, some states are enacting new legislation and seeking waivers from federal rules and regulations. Other states are attempting to reduce the number of women on welfare by improving existing programs, such as those funded under Jobs Opportunities and Basic Skills (JOBS) of the Family Support Act of 1988.

Proponents of welfare reform recognize that many AFDC recipients require additional education and training before they can become self supporting. The government presently offers an array of employment and training support—counselling, assessment, basic skills training, job search assistance, job development, as well as job training services—for which welfare recipients are eligible. However, with the prospect of imposed time limits, significant questions arise regarding both the extent and combination of government services necessary to move individuals off welfare.

This research authored by Carol Romero, Ph.D., an economist and Deputy Director of Research for the National Commission for Employment Policy, offers some practical answers to those questions. Dr. Romero is an expert researcher and has devoted nearly 20 years to evaluating and understanding issues such as those that arise regarding job training and the welfare system. Her dedication and professional acumen, which have resulted in the findings here, should help propel the welfare reform debate into a new dimension.

Dr. Romero's research is unique in that it presents new empirical evidence on the degree to which employment and training services provided under Title II-A of the Job Training and Partnership Act of 1982 (JTPA) have moved adult women AFDC recipients into the workplace and out of poverty. In an effort to parallel one option

under a "two years and out" requirement, the specific focus is on those women 22 years and older who had not worked at least one year prior to enrolling in JTPA programs.

To states in particular, this report provides useful information along another dimension. The data base consists of information that is routinely collected at the state level. In short, the study demonstrates how states could assess the effectiveness of specific services and combination of services in their JTPA and other programs in improving the post-program labor market experiences of AFDC recipients.

Specifically, the data base was developed as part of a collaborative effort between the Commission and many states. It contains information on JTPA participants that has been merged with the participants' earnings from Unemployment Insurance (UI) wage record data. The earnings are for one year before the participants enrolled in JTPA and for two years after they left the program. For this particular report, the data are from 11 states, which include 150 Service Delivery Areas (SDAs) and almost 6,500 women during Program year 1986.

This study has produced several major findings. First, the JTPA system placed in jobs three quarters of AFDC/JTPA participants who had not worked for at least one year prior to enrollment.

Second, job placement is critical to the women's prospects for success in the job market. Half of the women who had been placed were employed in all four quarters of their first post-program year and just under half were similarly employed in their second year. In contrast, fewer than 15 percent of those who found jobs on their own worked in all four quarters of their first post-program year and about 25 percent worked in all four quarters of their second year.

Third, there is a payoff to training as well as job placement. Those AFDC/JTPA participants placed from occupational classroom training and on-the-job-training were significantly more likely to be employed all four quarters in both post-program years than those who had been placed after receiving minimal aid, such as job search assistance.

Fourth, AFDC recipients can rise above poverty although it may take two years to do so. For example, 16 percent of those placed by JTPA were above poverty in their post-program year and 22 percent were above poverty in their second year. In contrast, among those not placed from the system, two percent were above poverty in the first year and eight percent were above poverty in their second year. In this context, the poverty threshold is \$9,885 per year, the 1990 Census poverty threshold for a three-person family.

Again, those placed from "intensive" activities, such as occupational classroom training and on-the-job-training, were more likely to be above poverty than their counterparts who had been placed from minimal services, such as job search assistance.

Fifth, while occupational classroom training and on-the-job-training are generally effective for AFDC/JTPA participants, this report shows that there are differences in what "works best for whom." For example, among younger African-American AFDC/JTPA participants (aged 22 through 35), school dropouts benefited more from on-the-job-training, while graduates benefited more from occupational classroom training.

Finally, this study demonstrates that there is no single treatment that will end welfare "as we know it." A combination of services customized to individual needs works best. Training and job placement can end dependency but are ineffective without the services that make welfare recipients available and ready to be trained and placed. From start to finish, the process must focus on the client, beginning with a complete individual assessment that will suggest the appropriate mix of other services necessary such as counselling, job search aid, training and placement. The result should be a positive transition into the world of work. In addition, support services, such as child care and transportation, must be made available. And, services must include "job development," or assistance aimed at finding available jobs for recipients; unless program operators know where jobs are, other services will be unfocused and much less effective.

For the purposes of making welfare reform "work," one important caveat must be noted. The AFDC recipients who participate in JTPA programs appear to be a select group in the sense that they were motivated to (re-)enter the work force. Of the women studied here, three quarters reported that they were "looking for work" at the time they enrolled. In contrast, fewer than 20 percent of all AFDC recipients who had not been employed in the previous year reported that they were looking for work, according to national data from the Current Population Survey.

In conclusion, this report demonstrates that JTPA Title II-A programs did assist many AFDC recipients, in terms of both improving their chances for employment and their ability to become economically self-sufficient. Still much more would be required in a "two years and out" welfare reform program. Many more women would need to be assisted and all would need to become employed.

Many of the necessary changes to meet these challenges are already underway. JTPA's performance management system has developed outcome goals for its participants that come close to measures of self-sufficiency. In addition, states and localities have been improving their services through increased program coordination for some time. The JTPA system, largely due to the 1992 Job Training Reform Amendments, emphasizes providing "intensive" training activities, such as occupational classroom and on-the-job-training, to program participants. The JOBS program provides a basic welfare-to-work policy architecture, but performance goals for JOBS training providers and participants have yet to be established.

However, even the positive evidence reported here does not suggest that there is a silver bullet to end welfare dependency. Essentially, we must transform the "culture of the welfare" from a program system long geared towards maintenance to one that encourages self-sufficiency. While such a conversion requires much of recipients, the shift to a service culture that emphasizes the transition into the world of work,

requires as much of policymakers and program administrators. Additionally, a "two years and out" mandate would demand not only a substantial increase in the scale of training programs, but increased efficiency, productivity and improved coordination among local program administrators and local labor markets.

This study suggests that we would improve the effectiveness of existing programs by increasing the effectiveness of program treatments. With more supportive services, more welfare clients are likely to be available for work. And, more effective programs will provide more bang for our limited political bucks.

To that end, our findings suggest three logical corollaries: first, we cannot have more effective programs without increasing the professionalism of program providers. We are giving welfare professionals a new mission—they need to be trained for it and given the tools to succeed. Second, we will need improved coordination among services from child care to training, if we are to maximize the effect on individual clientele. Third, we cannot judge and encourage effectiveness without setting performance goals in current programs.

Perhaps most importantly, programs need to develop better assessment and evaluation techniques to determine a combination of customized services aimed at moving individual AFDC recipients, ostensibly permanently, off welfare. For example, basic skills training does not lead to jobs, but it may prepare an individual for formal job training. Until recently, the system has focused on gross efficiency in placement as opposed to maximizing its technical capability in moving people off public assistance, into financially viable employment and ultimately out of the system altogether.

Further, a fair amount of attention recently has been devoted to the prohibitive costs of building a new system for the delivery of training and other services to welfare recipients under a "two years and out" plan. This report suggests that a structure already exists for the delivery of such services. With programs like JTPA and JOBS in place, it hardly seems necessary to create new and expensive duplicative programs solely to institute reforms demanded by the proposed time limit.

Counseling, assessment, job development and job search assistance are fairly inexpensive, currently available to AFDC recipients and make it possible for job training, a more costly service, to work. The foundation for "two and out" already exists. To make it work, and make it work more efficiently for a larger population is where the focus now should lie—an admittedly daunting task in and of itself. Yet, JTPA programs alone and in combination with JOBS programs, have responded to new challenges in the past, although they have needed time to adjust. Meeting this challenge will require close cooperation among many parties, not only policymakers and program administrators, but also among AFDC recipients themselves and their future employers.

We should however, be encouraged by this study. There is simple wisdom in the urge to move Americans from welfare to work. Ultimately, a good job is the ticket for admission into the American mainstream. For that reason we need welfare reform now more than ever, particularly since the American economy is hurtling

into the future like a runaway train and the relative value of skill and work experience has doubled in a decade. Those with access to work and learning can become contributing and productive members of society. Those without are simply falling further and further behind.

Anthony P. Carnevale
Chairman

Table of Contents

ACKNOWLEDGEMENTS	i
CHAPTER ONE: Introduction	1
Objective of Study	1
Outline of Report	2
A "Two Years and Out" Program	3
CHAPTER TWO: JTPA Training Activities	7
Structure and Administration	7
Participants' Training Decisions	10
AFDC/JTPA Participants' Reasons for Leaving JTPA	11
CHAPTER THREE: Data Base and AFDC/JTPA Participants' Characteristics	17
Database and Measures of "Self-Sufficiency"	17
Characteristics of AFDC/JTPA Participants	19
CHAPTER FOUR: Overview of Post-Program Outcomes	27
1990 Census Poverty Threshold	27
Employment Outcomes	31
Average Annual Earnings and Economic Self-Sufficiency	32
CHAPTER FIVE: JTPA Training and Placement: Post-Program Outcomes for AFDC/JTPA Participants	39
Non-Experimental Approach in This Report	40
Findings on the Relationship Between the Characteristics of AFDC/JTPA Participants and Their Placement from Training Activities	41

Findings on the Relationship Between JTPA Training/Placement and Stable Employment Among AFDC/JTPA Participants	43
Findings on the Relationship Between JTPA Training/Placement and "4-Quarter Employed AFDC/JTPA Participants Rising Above the Poverty Threshold	46
CHAPTER SIX: JTPA Training and Placement: What Works Best for Whom?	53
Characteristics of Subgroups of AFDC/JTPA Participants	54
Findings on Post-Program Outcomes for Subgroups of AFDC/JTPA Participants	54
CHAPTER SEVEN: Summary and Conclusions	63
AFDC/JTPA Participants' Post-Program Employment	63
AFDC/JTPA Participants' Post-Program Self-Sufficiency	65
A Role for JTPA in a "Two Years and Out" Program	68
APPENDIX A: Research Findings from Welfare Demonstration Projects	71
APPENDIX B: Definitions of Variables Used in Multivariate Models	79
APPENDIX C: Results of Logit Models in Chapter 5	83
APPENDIX D: Results of Post-Program Employment Models in Chapter 6	91
APPENDIX E: Results of Post-Program Poverty-Threshold Models in Chapter 6	105
REFERENCES	119

Acknowledgements

The author of this report wishes to acknowledge both the assistance and the collegial support of several people during various stages of preparing this report. In the initial stage, Dr. William Bowman, Annapolis Economic Research, offered suggestions that were invaluable to the research design.

Throughout the project, Mr. John Baj, Center for Governmental Studies, Northern Illinois University, provided critical computer support. Also, due to his extensive knowledge of both the JTPA system and the data on which this research is based, his comments on draft reports contained important insights into interpretations of the results.

Several other individuals' comments on an early draft served to strengthen the final product: Dr. William Bowman; and on the Commission staff, Dr. Janet Johnston, Dr. Steven Rose, and Dr. William Spriggs. Finally, the report benefitted substantially from the intensive review it received from Dr. Vincent Geraci, Department of Economics, University of Texas-Austin.

■ CHAPTER ONE: Introduction

Objective of Study

This study presents new empirical evidence on the employment and earnings outcomes of adult women on welfare who participated in training programs funded under Title II-A of the Job Training Partnership Act of 1982 (JTPA). Because Title II-A authorizes such programs for economically disadvantaged youth and adults, it has been a major source of funds for training recipients of Aid to Families with Dependent Children (AFDC). Over 120,000 female AFDC recipients have been served annually by JTPA Title II-A programs since the mid-1980s; this amounts to approximately one third of all female JTPA Title II-A participants.¹

The study assesses the effectiveness of JTPA training programs for AFDC recipients at a time when the goal of "moving welfare recipients into the workplace" has captured national attention. The precise policy goal of the Clinton Administration is captured by such phrases as "changing welfare as we know it" and "two years and out."

Administration efforts recognize that many AFDC recipients will require additional education and training if they are to earn a "living wage" for themselves and their families. Indeed, many women leave welfare for reasons that have nothing to do with their own earnings power: for example, between 1968 and 1982, 46 percent left AFDC because either they married or their children left home.²

This study examines the post-program employment and earnings of adult females (22 years of age or older) who were in families receiving AFDC at the time they enrolled in JTPA Title II-A programs.³ The data are from 11 states, which include almost 150 local sites (termed Service Delivery Areas or SDAs), and cover Program Year (PY) 1986.⁴

In an effort to parallel one option under a "two and out" program, the analysis is further restricted to those adult female AFDC recipients who had not been employed in the year prior to entering JTPA training. They amounted to about one half of the adult AFDC recipients served in the states included in the analysis.

It is not possible to identify women who had been without jobs for two years or more due to data limitations. Nevertheless, the women examined here may be viewed as part of the target group for a new AFDC program since by the time they entered JTPA training it is likely that they were already one year into a period of "temporary support."⁵

To date, most of the evidence on the effectiveness of training programs for AFDC recipients comes from welfare demonstration projects.⁶ Findings on the

effectiveness of the program for welfare recipients — Job Opportunities and Basic Skills (JOBS), funded under the Family Support Act of 1988 — are not yet available.⁷ While there are findings on the employment and earnings outcomes of participants in JTPA programs, they offer little guidance for developing a nationwide program for AFDC recipients: a problem with this JTPA evaluation is that the experiment was conducted from a non-randomly selected set of sites.⁸

For several related reasons, this examination of JTPA programs is more useful than the welfare demonstration projects for a broad-scale effort to assist AFDC recipients.

Some of the reasons relate to JTPA programs themselves. First, they exist throughout the nation; in contrast, sites of the welfare demonstrations projects were not statistically representative of all sites nation-wide, making it difficult to use their results to develop a national program. Second, JTPA programs have served sizeable numbers of AFDC recipients, as noted earlier; and they are currently used in many localities to provide training to JOBS recipients. Third, because JTPA programs are based in law, the programs must follow set rules; the effect of these rules on post-program outcomes can be evaluated and changes made where necessary.

The final reason for the usefulness of this examination is that it is an assessment of JTPA programs as they are in the "real world." The data, which are administrative, were collected from JTPA programs as they normally operated. In contrast, the demonstration projects occurred in controlled settings.⁹

Outline of Report

Because this report deals with both AFDC recipients and JTPA programs, it has two audiences: persons knowledgeable about programs and research findings for AFDC recipients, and those knowledgeable about programs and research findings for JTPA participants. As a result, the report covers material that is known to one audience but not necessarily to the other. Because the report focuses on JTPA programs, Chapter 2 gives a brief description of the law and its implementation, emphasizing those elements relevant to serving AFDC recipients. Data on the reasons adult women on AFDC leave JTPA programs are also given. A review of the literature on the welfare demonstration projects is in Appendix A.

Chapter 3 describes the data used in the empirical analysis and also presents descriptive information on the characteristics of the AFDC/JTPA participants being examined. Chapter 4 gives summary data on the women's post-program outcomes.

Chapter 5 explains the approach used in the multivariate analyses in this study and contains the results of the analyses of the AFDC/JTPA participants' post-program outcomes. Chapter 6 presents results of multivariate analyses of the post-program outcomes of AFDC/JTPA participants of different ages, educational backgrounds, and race/ethnicity. Chapter 7 contains the summary and conclusions.

The remainder of this Introduction briefly describes some of the employment and training issues raised by a "two and out" welfare program as well as the group of women who are studied in this report.

A "Two Years and Out" Program

The goal of the Clinton Administration is to recast AFDC dramatically: away entirely from an income-maintenance program. At present, individuals with dependent children may receive AFDC as long as their youngest child is under age 18. The precise amount of AFDC received is based on the amount of an individual's income and assets and is determined at the state level.¹⁰

A new AFDC program would provide temporary support until the recipients obtain jobs that are financially viable for them and their families. Although no specific time limits for this temporary support have been proposed, a maximum of two years has been suggested.¹¹ The reason for a two-year maximum appears to stem from a desire to reduce long-term welfare dependency: about half of all AFDC recipients have been receiving AFDC for more than two years.¹²

Because there are many details involved in developing a "two and out" policy, there are many questions that must be addressed. Some key employment- and training-related questions are given below.¹³

- Should the two-year period refer to the length of time AFDC recipients are permitted to take education or training programs while still receiving AFDC? Alternatively, should the two-year period refer to the length of time after receipt of training?
- How important are training programs — compared to direct job placement — in terms of the improving AFDC recipients' prospects for "stable" employment?
- How important are training programs — compared to direct job placement — in terms of raising above poverty those AFDC recipients who become employed?
- Does the effectiveness of various training strategies differ for AFDC recipients with different characteristics?

This study indicates some answers to these questions.

Endnotes

1. U.S. Department of Labor, Office of Strategic Planning and Development, *Job Training Quarterly Survey: JTPA Title IIA and III Enrollments and Terminations During Program Year 1988*, Washington, D.C.: U.S. Department of Labor, (February 1990), Tables 9 and 15, pp. 21 and 27; and U.S. Department of Labor, Office of Strategic Planning and Development, *Job Training Quarterly Survey: JTPA Title IIA and III Enrollments and Terminations During the First Three Quarters of PY 1990*, Washington, D.C.: U.S. Department of Labor, (September 1991), Tables 9 and 15, pp. 21 and 27.
2. Twenty six percent left AFDC because their earnings rose; 14 percent because "other income" rose; and 14 percent left for other reasons. Sar Levitan and Frank Gallo, *Jobs for JOBS: Toward a Work-based Welfare System*, Occasional Paper 1993-1, Washington, D.C.: Center for Social Policy Studies, The George Washington University (March 1993), Figure 5, p. 40.
3. In 90 percent of the cases the women report themselves as heads of households; in 10 percent of the cases the women report they are in families where another person is the head of the household, e.g., the mother. This is likely to be a household which consists of an AFDC unit living with an extended family.
4. Approximately 600 SDAs were in existence in PY 1986, which ran from July 1, 1986 through June 30, 1987. The data base is described in Chapter 3.
5. Of course, some of the women may have become enrolled in AFDC just before entering JTPA. Their non-employment in the prior year may have been due to marriage and family responsibilities, with divorce or their husband's death precipitating their enrollment in AFDC. Data limitations do not permit identifying these women who are often termed "displaced homemakers."

In addition, some women move between AFDC and employment. They are explicitly omitted from this analysis. For an examination of their characteristics and work/welfare patterns see Heidi Hartmann and Roberta Spalter-Roth, "The Real Employment Opportunities of Women Participating in AFDC: What the Market Can Provide," Paper Presented at Women and Welfare Reform: Women's Poverty, Women's Opportunities, and Women's Welfare, A Policy Conference to Break Myths and Create Solutions," Washington, D.C.: Institute for Women's Policy Research, (October 23, 1993).

6. For example, see Judith M. Gueron and Edward Pauly, *From Welfare to Work*, New York: Russell Sage Foundation, 1991; Daniel Friedlander, James Riccio, and Stephen Freedman, *GAIN: Two-Year Impacts in Six Counties*, New York: Manpower Development Research Corporation (May 1993); and Anne Gordon, and John Burghardt, *The Minority Female Single Parent Demonstration: Short-Term Economic Impacts*, Mathematica Policy Research, Inc., Report under contract to The Rockefeller Foundation, New York: The Rockefeller Foundation, (March 1990). Findings using another approach are found in June O'Neill, *Work and Welfare in Massachusetts: An Evaluation of the ET Program*, Pioneer Paper Number 3, Boston, Massachusetts: Pioneer Institute for Public Policy Research, (1990).

7. In broad terms, JOBS requires states to provide education, training, and job search assistance to AFDC recipients. The federal government provides states with matching funds through formulas based on the type of expenditure involved, such as for work-related services, support services, or administration. To avoid a reduction in matching funds, at least 55 percent of JOBS expenditures must be for families in which the custodial parent is under age 24 and has one of the following characteristics: no high school diploma, little or no work experience in the year prior to participation in AFDC, the youngest child is within two years of ineligibility, or the family received AFDC during 36 of the prior 60 months. For detailed descriptions, see Gueron and Pauly, (1991); and Levitan and Gallo, (March 1993).
8. The 16 sites were from a universe of approximately 600 sites. See Abt Associates, *The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months*, Report prepared for the U.S. Department of Labor, Bethesda, Maryland: Abt Associates (January 1993); and Abt Associates, *The National JTPA Study, Overview: Impacts, Benefits and Costs of Title II-A*, Report prepared for the U.S. Department of Labor, Bethesda, Maryland: Abt Associates (January 1994). For a review of the national JTPA study, see William R. Bowman, *Evaluating JTPA Programs for Economically Disadvantaged Adults: A Case Study of Utah and General Findings*, Research Report Number 92-02, Washington, D.C.: National Commission for Employment Policy, June 1993.
9. Specifically, the welfare demonstration projects were "social experiments." Individuals were *randomly assigned* at program intake either to a group that was to receive services (the "treatment group") or to a group that was not to receive services (the "control group"). The goal was to create two groups who were as similar as possible except that one received the "treatment" while the other did not. Subsequently, the employment, earnings and AFDC benefits of the two groups were compared in order to ascertain the extent receipt of program services made the "treatment group" better off economically than the "control group."

For purposes of evaluating the effectiveness of programs, social experiments have advantages over examinations of programs as they normally operate, as discussed in Appendix A. However, their results are based on a critical assumption: persons responsible for providing the services, as well as the members of the treatment and control groups, do not change their behavior as a result of being in an experiment. Serious questions have been raised about the validity of this assumption. To the extent it is not valid, findings based on the controlled settings of the welfare demonstration projects would not necessarily be replicated in the "real world." For example, see James J. Heckman, "Randomization and Social Policy Evaluation," in Charles F. Manski and Irwin Garfinkel eds., *Evaluating Welfare and Training Programs*, Cambridge, Massachusetts: Harvard University Press (1992).

10. For a brief and succinct description of AFDC eligibility rules, see National Commission for Employment Policy, *Coordinating Federal Assistance Programs for the Economically Disadvantaged: Recommendations and Background Report*, Special Report Number 31, Washington, D.C.: National Commission for Employment Policy (October 1991), Appendix A.

11. See the description of President Clinton's proposal in Douglas J. Besharov with Amy Fowler, "The End of Welfare as We Know It?" *The Public Interest*, Number 111 (Spring 1993) pp. 95-108.
12. Committee on Ways and Means, U.S. House of Representatives, *Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*, 1989 Edition, Washington, D.C., U.S. Government Printing Office, (March 15, 1989), Table 23, p. 565.
13. See also "Time Limits are Coming, Shalala Vows," *Employment and Training Reporter*, Volume 24 Number 45, (July 28, 1993), Washington, D.C.: MII Publications, Inc., p. 906. The reader should note that other issues involved in welfare reform, such as the provision of health care and child care, and financing a new program, are beyond the scope of this report.

■ CHAPTER TWO: Prior Evaluations of Federal Training Programs for Economically Disadvantaged Adults

This chapter provides a brief overview of JTPA Title II-A programs, including how they were organized, and the activities that were authorized, during the period under examination in this report. Significant changes due to the 1992 Job Training Reform Amendments (PL 102-367) are also noted. Because the purpose of this chapter is to give a context for the empirical analysis that follows, only those aspects of the Title II-A programs that would be especially relevant to training AFDC recipients are discussed.¹

Structure and Administration

Prior to the 1992 Amendments, Title II-A of JTPA authorized year-round training programs for economically disadvantaged adults (ages 22 and older) and youth (ages 16-21). At least 40 percent of the funds were to be used to train youth. Because of this particular provision, JTPA programs were split between those that served youth and those that served adults. The age of AFDC recipients determined whether they enrolled in a youth or adult program.²

Adults (and youth) receiving AFDC automatically qualify for JTPA Title II-A training. They do not have to meet any further eligibility requirements.

AFDC recipients (and eligible school dropouts) are explicitly mentioned in the JTPA legislation. Prior to the 1992 Amendments, AFDC recipients were to be "served in an equitable basis, taking into account their proportion of economically disadvantaged persons sixteen years of age or over in the area."³

JTPA provides five types of services to adults. The three major ones are: (a) occupational classroom training, (OCT); (b) basic/remedial education, (B/R Ed); and (c) on-the-job training, (OJT). Job search assistance (JSA) was a fourth service, frequently used as a "stand alone" activity before the Job Training Reform Amendments.⁴ Finally, JTPA also offers support services, such as counselling.

JTPA does not permit participants to receive stipends while in training. Of course, since welfare recipients receive AFDC benefits, this provision is less likely to affect their participation in training than individuals who have no source of income for themselves or their families.

Some funds are available for support services, which includes payments for child-care, transportation, books, etc., as well as needs-based payments and work

experience. Before the 1992 Amendments, a maximum of 15 percent of a local area's [termed Service Delivery Area, (SDA)] Title II-A funds could be used for these purposes. Another maximum of 15 percent was allowed for administrative purposes. A minimum of 70 percent was to be allocated to training.⁵

JTPA is an outcomes-oriented program. The U.S. Department of Labor (USDOL) establishes measures of performance and assigns numerical values to them (performance standards) for the system as a whole. Changes in the measures and the standards may only occur at the start of a two-year program cycle. There are separate measures and standards for adults and youth. In addition, there are separate performance measures and standards for adult welfare recipients and for "all" adults. (There are no separate measures or standards either for youth welfare recipients or for non-welfare adult participants.)

The measures of performance for adult welfare recipients and their performance standards are shown in Table 1. The comparable measures and values for all adults are also shown for purposes of comparison.⁶

These data suggest two points. The first is that JTPA's performance measures have changed over time as the system has gained experience. Initially, the performance measures were outcomes at the time individuals left the program (e.g., entered employment rates). Consistent with the Act's goal of improving participants' long-run employment and earnings, the entered employment rates were replaced with measures of employment status 13 weeks after participants have left the program.⁷ Also added were measures of weekly earnings for those employed during the 13th week after program termination. They replaced the measure, "wage rate at termination," for all adults; they were a new measure for welfare recipients.

Second, the performance standards for AFDC recipients are not as stringent as those for adult participants generally. This difference is due to USDOL's awareness that welfare recipients are likely to be more difficult to train and place in jobs than adult participants in general.

During the period under examination there was another performance measure for JTPA's adult programs that must be mentioned. This measure, "Cost per Entered Employment," effectively set a cap on JTPA expenditures per employed terminnee. At the national level, the specific standard for this measure was \$4,374. This measure was dropped in PY 1990 to encourage the JTPA system to (a) provide more intensive services to all participants and (b) increase the number of participants who are "hard to serve," i.e., those who require more intensive services.

Recognizing that SDAs differ in their ability to meet a single national standard, the USDOL has also developed a "performance standards adjustment model." This model may be used to raise or lower a SDA's performance standard to take into account factors considered to be outside the control of SDA administrators. Such factors include clients' personal characteristics (e.g., school dropout) and local economic conditions (e.g., the unemployment rate).

States decide whether they wish to use the Department's adjustment model for their SDAs, develop one of their own, or permit no adjustments to the standards of performance they expect their SDAs to meet.

Table 1
Selected JTPA Measures of Performance and
Performance Standards for AFDC Recipients and All Adults
(PY 1984-1993)

Performance Measures and Standards	All Adults (a)	Adult Welfare Recipients
Entered Employment Rate (percent employed at program termination)		
PY 1984-85	55%	39%
PY 1986-87	62%	51%
PY 1988-89	68%	56%
PY 1990-91	(b)	(b)
PY 1992-93	(b)	(b)
Follow-up Employment Rate (percent employed in 13th week after program termination)		
PY 1984-85	(c)	(c)
PY 1986-87	(d)	(d)
PY 1988-89	60%	50%
PY 1990-91	62%	51%
PY 1992-93	60%	46%
Follow-up Weekly Earnings (average weekly earnings for those employed in 13th week after program termination)		
PY 1984-85	(c)	(c)
PY 1986-87	(d)	(d)
PY 1988-89	\$177	(e)
PY 1990-91	\$204	\$182
PY 1992-93	\$228	\$207

- (a) All adults includes adult welfare recipients.
(b) Standard dropped.
(c) Measure of performance not established.
(d) Data collection required; no national standard established.
(e) Data collected for all adults; no separate measure for welfare recipients.

Sources: U.S. Department of Labor, Employment and Training Administration, *Employment and Training Administration, Guide for Setting JTPA Title II-A and Title III (EDWAA) Performance Standards for PY 89*, Washington, D.C.: U.S. Department of Labor, (May 1989); U.S. Department of Labor, Employment and Training Administration, *JTPA Title II-A and III Enrollments and Terminations During Program Year 1990 (July 1990-June 1991)*, Washington, D.C.: U.S. Department of Labor, (January 1992); and Marcy Smith, "DOL Performance Standards to Set Lower Employment Measure," *Employment and Training Reporter*, Volume 25, Number 26, Washington, D.C.: MII Publications (March 9, 1994), p 492.

Performance standards are important to the SDA administrators who manage the training programs because additional funds may become available to those SDAs that exceed the standards. These funds are commonly called "incentive awards" and they are part of the states' total JTPA Title II-A allocation. It is at the state level that decisions are made regarding the distribution of these incentive bonuses to SDAs. For example, some states choose to have their SDAs compete for the funds; others award the funds on the basis of achieving a particular level of performance, regardless of the performance of other SDAs.⁸

It is apparent from the above description that JTPA is quite decentralized and that there are likely to be many differences in its operation across states. Further differences exist within states at the SDA level, since it is at this level that decisions are made on issues such as whether or not special groups (such as AFDC recipients) are to be especially targeted for training, the types of training activities that are to be offered, and which training providers will be selected.⁹

Participants' Training Decisions

JTPA Title II-A is a discretionary program, i.e., applicants are accepted into the program at the discretion of service providers. In addition, JTPA is a voluntary program for economically disadvantaged persons. In some SDAs, JTPA has been strictly voluntary for AFDC recipients as well. However, even before the JOBS programs was enacted, in some SDAs, AFDC recipients were either strongly encouraged to participate or their participation was mandatory.¹⁰

Whether training is made mandatory for AFDC recipients is one of the issues involved in limiting the amount of time persons may be on AFDC. Individuals appear to respond more favorably to programs they **choose** to enter than to programs they are required to enter.¹¹

Once individuals have been determined to be eligible for JTPA training in general, the next step is the selection of a training activity.¹² Participants and JTPA training providers make this selection together. Their selection process may be broadly characterized as follows:

- Participants' preferences are based on their desires for particular types of skills (e.g., attaining a GED or learning word processing) and the extent of their need for financial support while in training (e.g., whether or not they have a source of income that permits them to spend time in classroom training).
- Training providers' suggestions are based on local labor market conditions in conjunction with the types of training slots available, assessments of the skills needed by the individuals, and the stated preferences of the participants.

Participants' preferences are key to the ultimate selection of a training activity for a very simple reason. Because the training is voluntary, individuals who do not like the offerings will leave before even enrolling. Further, if they do enroll and

subsequently discover they do not like the training (or a better alternative arises), the participants will drop out prior to placement in jobs. Failure to place participants is not in the best interest of training providers since it reduces their ability to meet their performance standards and wastes their JTPA resources.

The empirical analysis in this report focuses on the post-program impact not only of the type of training the adult female AFDC/JTPA participants received, but also of their placement. It will be seen that placement, as well as type of training, is key to improving these women's post-program employment and earnings.

AFDC/JTPA Participants' Reasons for Leaving JTPA

States collect data on the reasons why participants leave JTPA programs for purposes of performance management. The reasons are classified as "positive terminations" and "non-positive terminations."

Positive terminations include participants who either were placed in jobs or entered some productive activity that is outside the labor market, e.g., they enrolled in school or in some training activity other than that funded under JTPA Title II-A. In PY 1986 63 percent of adult female AFDC/JTPA participants, who had not worked in the prior year, were placed in jobs. Another 4 percent of these AFDC/JTPA participants entered some other productive activity.

"Non-positive terminations" are participants who left the program prior to placement. There has been little analysis of the reasons for participants' non-positive termination, largely because the "types" of non-positive termination have not been part of JTPA's performance management system. However, for purposes of assessing the effectiveness of the training programs — and ways to improve them — it is important to know why participants leave prior to placement.

In this study, non-positive terminations have been divided into two groups. The sizes of the groups are necessarily rough approximations of their actual sizes in reality since the data were not collected in a uniform fashion across states during the period under study.¹³

The first group is intended to include the AFDC/JTPA participants who left training for reasons where some form of program assistance, such as counselling or the provision of support services, could have made a difference. Examples of this type of non-positive termination include: pregnancy; problems with health, family, or transportation; and refusal to continue with the program. These non-positive terminations amounted to 18 percent of the adult female AFDC/JTPA participants who had not worked in the previous year.¹⁴

The second group of non-positive terminations is intended to include participants whose reasons for leaving prior to placement differ considerably from the previous group; that is, the reasons are beyond the ability of the JTPA system to provide assistance. Examples include: geographical move, death, incarceration, and determination of ineligibility for JTPA services. This group amounted to 15 percent of the adult female AFDC/JTPA participants studied here.¹⁵ **This second group**

of non-positive terminations is excluded from further analysis because JTPA program operators had little or no ability to influence the participants' decisions to leave the program.

Table 2 shows the percentages of AFDC/JTPA participants who were in the three termination categories by the last training activity in which they were enrolled.¹⁶ These data suggest two points. First, there were differences across training activities in the percentages of AFDC recipients who dropped out of training for reasons where the program operators might have been able to provide assistance.

- The highest "dropout rate" is found among those in basic/remedial education (B/R Ed): over 35 percent of those enrolled in this activity left prior to placement.
- The next highest dropout rate — about 20 percent — occurred among those enrolled in occupational classroom training (OCT) and those in job search assistance and/or support services (JSA/SS).
- Participants in on-the-job training (OJT) had the lowest percentage who left prior to placement (14.2 percent).

Table 2

Placement Rates by Training Activities:
AFDC/JTPA Participants not Employed in Year Prior to Enrollment (a)
(PY 1986)

Training Activities	Total		Positive Termination		Percent Who Left Prior to Placement(b)
	Number	Percent	Percent Placed in a Job	Percent Other E&T	
Number	6,751	—	5,045	284	1,422
Total Percent	—	100.0	74.7	4.2	21.1
OCT	3,009	100.0	72.9	4.5	22.6
B/R Ed	527	100.0	53.7	9.7	36.6
OJT	1,505	100.0	84.9	1.0	14.2
JSA/SS	1,710	100.0	75.6	5.0	9.6

(a) Data are for 11 states. Chapter 3 contains a description of the data base.

(b) These AFDC/JTPA participants left training for reasons where some form of program assistance, such as counselling or the provision of support services, could have made a difference. Examples of the reasons include: problems with transportation, child-care or health. Excluded are 1,236 AFDC/JTPA participants who left training for reasons outside the control of training providers, e.g., participants moved out of the area or were found to be ineligible for JTPA training.

Second, regardless of their training activity, the majority of AFDC/JTPA participants were in the category "positive termination - placed in job"; very few were in the category "positive termination - other education and training." It is noteworthy that the highest percentage in the "other" category (9.7 percent) was found among those likely to be most in need of additional education and training, i.e., those who had taken basic/remedial education. The lowest (1 percent) was found among those in on-the-job training.

The AFDC/JTPA participants whose termination status was "positive -other education and training" are also excluded from the analysis which follows because they may have been in school or training (rather than in the labor force) during the post-program period examined here. Thus the empirical examination is of two groups: those who were placed in jobs and those who left prior to placement for reasons where some form of program assistance could have made a difference.

Endnotes

1. A more detailed discussion of JTPA and how it has changed as a result of the 1992 Job Training Reform Amendments is contained in National Commission for Employment Policy, *Private Industry Councils: Examining Their Mission Under the Job Training Partnership Act*, Special Report Number 35, Washington D.C.: National Commission for Employment Policy, (March 1993).
2. A split between youth and adult programs will continue with the 1992 Amendments. The difference is that due to the Amendments, Title II-A is now reserved for year-round adult programs. Youth in year-round programs will be served under a new Title II-C. Title II-B authorizes summer programs for youth.
3. Under the 1992 Amendments, a minimum of 65 percent of JTPA adult participants must have one characteristic that defines them as "hard-to-serve," other than being economically disadvantaged. Receipt of "cash welfare payments, including recipients under the JOBS program" is listed as one characteristic of a "hard-to-serve" adult. Other characteristics are, for example, being a school dropout, basic skills deficient or homeless. Service Delivery Areas may add one characteristic to the list given in the legislation after receiving approval from their state. (See the Job Training Reform Amendments of 1992, Section 203.)

A minimum of 65 percent of the youth participants must also have a characteristic, other than being economically disadvantaged, that defines them as "hard-to-serve." However, being a recipient of "cash welfare payments" is not listed as one of the characteristics, even though a "youth" may be a mother and a recipient of AFDC.

4. With the Amendments, JTPA training providers may no longer offer JSA as a stand-alone service if the activity is offered by another local agency, such as the Employment Service. Similar services are offered to youth; in addition, dropout prevention is a major JTPA activity for youth.
5. The 1992 Amendments raised the maximum allowable expenditure on support services to 30 percent, and on administration to 20 percent. The minimum allowable expenditure on training is now 50 percent.

This change seems to have occurred for two reasons. First, the Amendments include a requirement to serve "hard-to-serve" individuals, as noted earlier. Because such participants are more likely than others to need some type of support service in order to participate in training, it was necessary to increase the amount of funds that could be used for this purpose. Second, there were pressures to increase the amount that could be expended on administrative matters, for example, on increasing staff salaries to adjust for cost-of-living increases.

6. For a more detailed discussion of all the performance measures for adults, see Chapter I of National Commission for Employment Policy, *Using Unemployment Insurance Wage-Record Data for JTPA Performance Management*, Research Report Number 91-07, Washington, D.C.: National Commission for Employment Policy, (June 1992).

7. Further changes may be forthcoming as a result of the outcome of USDOL-funded state demonstration projects using Unemployment Insurance (UI) wage record data in lieu of the 13-week follow-up survey.
8. Alternative approaches are discussed in SRI International, *Developing Effective JTPA Performance Standards Incentives Policies: A Technical Assistance Guide*, Research Report Number 89-07, Washington, D.C.: National Commission for Employment Policy, (March 1990).
9. For a discussion of differences in JTPA at the local level, see National Commission for Employment Policy, (March 1993).
10. Unfortunately, information on the number of SDAs in which participation of AFDC recipients was voluntary, strongly encouraged, or mandatory is not available.
11. See Robert Moffit, "Incentive Effects of the U.S. Welfare System: A Review," *Journal of Economic Literature*, Volume XXX, (March 1992), p. 43; and Carol J. Romero, Donald Cox, and Arnold Katz, *The Potential Effectiveness of the Employment Service in Serving Dislocated Workers under EDWAA: Evidence from the 1980s*, Research Report Number 91-02, Washington, D.C.: National Commission for Employment Policy, (October 1991), pp.88-90.
12. As noted earlier, receipt of AFDC by itself meets the eligibility criteria for JTPA for adults. No other criteria need be met.
13. In PY 1993 the USDOL implemented a Standardized Participant Information Record (SPIR) so that this information is collected in a uniform fashion across states.
14. Due to differences in states' coding systems, available data do not permit detailing the number of women who left the program for the specific reasons just given.
15. As with the other group of "non-positive terminations," it is not possible to determine the number of women who left the program for each of the specific reasons just given, due to differences among states' coding systems. However, for this group of women it was possible to develop a rough idea of the relative importance of the different reasons. Major reasons appear to have been: geographic move and participants were found to be ineligible. Also, some participants were coded as "did not show up for training." Included in this last group may be participants who moved or died, as well as some who might be more properly classified in the first category of non-positive terminations. It is not possible to classify more precisely the women who "did not show up for training."
16. A discussion of the number and types of training activities of the AFDC/JTPA participants is included in Chapter 3.

■ CHAPTER THREE: Data Base and AFDC/JTPA Participants' Characteristics

Database and Measures of "Self-Sufficiency"

The database used in the analysis is unique. It consists of the universe of JTPA participants in 11 states for Program Year (PY 1986).¹ From this overall universe, the universe of AFDC adult women, who were not employed in jobs covered by Unemployment Insurance (UI) in the year prior to enrollment in JTPA, was selected for analysis.²

The database consists of two sets of information that have been merged. One part contains data on JTPA participants (their personal characteristics and JTPA activities). The second part contains data on the participants' quarterly earnings that are from the states' UI wage records. The women's UI wage records are available for four quarters (one year) prior to their entry into JTPA and also for eight quarters (two years) after they have left the program.

The UI wage records were used in two ways. One was to classify women as employed or not employed: if they had no quarterly earnings in a job covered by UI, they were classified as not employed during that quarter. If they had some earnings, they were classified as employed.

The UI wage records were also used to establish the women's level of earnings for purposes of comparison with three measures of economic self-sufficiency. The first measure was an income above poverty. It was taken from the 1990 Census of Population.

- The poverty threshold for a 3-person family: \$9,885 per year (\$2,471 per quarter).³

A family size of three-persons was selected for purposes of determining economic self-sufficiency. This is an approximation of the women's actual status since the database does not contain information on the size of the women's family. Nevertheless, it is a reasonable approximation since the average number in an AFDC unit was three persons in the states included in the analysis.⁴

The other two measures were derived directly from states' AFDC systems.⁵ The first was an estimate of a "lower bound" of the amount an AFDC/JTPA participant would need to earn in order to be better off by working than by remaining on welfare.

- The maximum AFDC benefits that a three-person family could have received as of January 1987, the midpoint of the period being examined. This "Maximum Benefit Level" ranged from a high of \$5,904 annually to a low of \$2,388 across the 11 states.

The precise amount of AFDC benefits that a family receives depends upon its income and assets; it is possible for a family to have some earned income (for example) and still receive AFDC payments, albeit less than the maximum allowable. There is also an "upper bound" to the amount of income a family may have and still be a recipient of AFDC. The second state-based measure of economic self-sufficiency is an approximation of this upper bound (for example, it excludes measures of assets).

- The income limit for a three-person family above which the family no longer qualified for any amount of AFDC payments. This "Gross Income Limit" ranged from a high of \$17,760 annually to a low of \$6,328 across the states in January 1987.

The 1990 poverty threshold was used in the multivariate analyses of post-program outcomes (Chapters 5 and 6). The state-based AFDC measures, as well as the poverty threshold, were used to provide descriptive information on post-program outcomes (Chapter 4).

The 1990 Census poverty threshold, rather than the state-based measures, was used in the multivariate analyses for two related reasons. First, it could be considered analogous to JTPA's existing set of national performance measures. As of PY 1990, a variant of the poverty threshold has become part of JTPA's performance management system.⁶

Second, the poverty threshold is a less erratic target than the state-based figures. State governments can, and do, change the Maximum Benefit Level and the Gross Income Limit from one year to the next by amounts that are not readily predictable.⁷ This means that training providers seeking to place women in jobs that pay more than the Gross Income Limit in their state would be aiming at a target figure that could increase by amounts not known ahead of time. This could have important implications for a "two years and out" program. Conceivably, training providers could place women in jobs that paid more than the Gross Income Limit at the time the women left a training program; but a state-initiated increase in the Gross Income Limit in the following year could result in these same women becoming eligible for AFDC once again.

As a final note on these various measures of economic self-sufficiency, it is important to be clear that none adjust for non-cash benefits associated with receipt of AFDC, such as subsidized child care and medical care. In addition, none adjust for federal and state taxes. Thus, all the measures are approximations of a family's real ability to be economically self-sufficient on the mother's earnings alone.⁸

Characteristics of AFDC/JTPA Participants

Personal Characteristics

Column 1 of Table 3 shows the distribution across various personal characteristics of the PY 1986 AFDC/JTPA participants, without employment in the year prior to enrollment, who were included in this analysis.⁹ For purposes of comparison, column 2 shows the comparable distribution of all AFDC recipients who had not been employed in the prior year in the eleven states included in this analysis. To be complete, column 3 shows the distribution of all AFDC recipients in the eleven states, who had been employed in the prior year.

Almost 90 percent of the adult AFDC/JTPA participants were heads of their own households. The remainder were likely to be living with extended families, where the participants reported that a grandmother (for example) was the household head.

The percentages of Whites and Blacks in JTPA differed slightly from all AFDC recipients who had not been employed in the prior year. The AFDC/JTPA participants were somewhat more likely to be White (44 percent versus 36.9 percent); they were somewhat less likely to be Black (50.7 percent compared to 53.8 percent).

Both Hispanics and "Others" were somewhat less likely to be in JTPA than in the population of AFDC recipients. For example, 3.8 percent of the AFDC/JTPA participants were Hispanic, although Hispanics comprised 6.5 percent of the AFDC recipients who had not been employed.¹⁰

The age distribution of the adult AFDC/JTPA participants indicates that they were younger than the general population of adult AFDC recipients. Just over 80 percent of the AFDC/JTPA participants were between 22 and 35 years or younger. In comparison, just over 60 percent of all AFDC recipients who had not worked were in this age range.

Very few AFDC/JTPA participants had limited proficiency in English (1.4 percent).

The educational background of the AFDC/JTPA participants differed considerably from that of either group in the general AFDC population. Focusing on a comparison with the AFDC recipients who had not worked indicates that the AFDC/JTPA participants were —

- somewhat less likely to lack a high school diploma (34 percent versus 41.1 percent);
- considerably more likely to be high school graduates (49 percent versus 11.7 percent); and
- considerably less likely to have some post high school education (17 percent versus 47.3 percent).

Table 3

Personal Characteristics of AFDC Recipients:
 Recipients Without Employment in the Prior Year
 Who Are in JTPA Training, the Population of Recipients
 Without Employment in the Prior Year, and the
 Population of Recipients with Employment in the Prior Year
 (PY 1986)

Personal Characteristics	In JTPA and Not Employed in Prior Year (a)	General AFDC Population (b)	
		Not Employed in Prior Year	Employed in Prior Year
Total Number	6,467	486,510	305,510
Total Percent (c)	100.0%	100.0%	100.0%
Head of Household with Dependents			
Yes	88.7	na	na
No	11.3	na	na
Race/Ethnicity			
White	44.0	36.9	44.6
Black	50.7	53.8	49.8
Hispanic (d)	3.8	6.5	5.6
Other	1.5	2.9	0.0
Age			
22-25	28.2	20.1	23.4
26-30	32.3	23.6	21.8
31-35	20.9	18.6	18.5
36-40	11.1	13.2	15.8
41 and Older	7.4	24.6	20.5
Limited English Proficient			
Yes	1.4	na	na
No	98.6	na	na
Education			
Less than High School Graduate	34.0	41.1	16.0
High School Graduate	49.0	11.7	9.6
More than High School Education	17.0	47.3	74.4
Employment Status at Enrollment (e)			
Employed	3.1 (f)	5.2	54.8
Unemployed	75.2	16.7	14.5
Not in Labor Force	21.8	78.2	30.7

- (a) Data are for 11 states; the data base was described earlier in this chapter.
- (b) Data on the general population of AFDC recipients are from special runs of the March 1987 Current Population Survey for the states included in this analysis. The women were coded as employed in the prior year if they reported income from employment. They were coded as "not employed" if they did not report such income.
- (c) Totals may not add to 100 percent due to rounding.
- (d) Hispanics may be either White or Black.
- (e) For the general population of AFDC recipients, employment status refers to the week of the Current Population Survey in March 1987.
- (f) It should be noted that the UI wage record data showed these women as not employed. The most likely explanation for the difference between the two data sources is that the women were in uncovered jobs, e.g., they were domestic help.
- na — Not available

One of the key differences between the AFDC/JTPA participants and AFDC recipients generally was their labor force status. Specifically, the AFDC/JTPA participants were much more likely to report that they were unemployed, i.e., looking for work. In addition, they were less likely to report they were not in the labor force, i.e., neither employed nor looking for work.

- Three quarters of the AFDC/JTPA participants reported they were unemployed. In contrast, only 16.7 percent of the AFDC recipients, who had not worked, reported they were unemployed.
- Just over 20 percent of AFDC/JTPA participants said they were not in the labor force. Again in contrast, of all AFDC recipients who had not worked in the previous year, over three quarters said they were not in the labor force.

These particular findings about the AFDC/JTPA participants are noteworthy in the context of a national training program for all AFDC recipients. First, adult women who are AFDC/JTPA participants appear to be a select group compared to all AFDC recipients who had not been employed, since three-quarters were interested in (re-)entering the work force, i.e., they reported themselves as looking for work.

In addition, the unemployed AFDC/JTPA participants likely comprised those who voluntarily enrolled in JTPA. A large proportion of the one fifth who were not in the labor force may consist of those AFDC/JTPA participants for whom JTPA was mandatory.

Local Area Characteristics

Table 4 shows the distribution of the AFDC/JTPA participants by two economic characteristics of the local areas where they lived: the unemployment rate and the average annual earnings of workers covered by Unemployment Insurance in 1986.¹¹ These particular data reflect the fact that JTPA's allocation formula concentrates funds in areas with high rates of unemployment and poverty.

At a time when the national unemployment rate was 7 percent, just over half the AFDC/JTPA participants lived in areas with an unemployment rate above the national average. Also, 72.2 percent lived in localities where the average annual earnings were less than \$5,000 per year.

Program Characteristics

Sixty two percent of the adult AFDC/JTPA participants examined here took only one training activity; another 25 percent took two activities; the remaining 13 percent took three or more.¹² Of those who took only one activity,

- 40 percent were enrolled in occupational classroom training (OCT);
- 6 percent were in basic/remedial education (B/R Ed);
- 19 percent were in on-the-job training (OJT); and
- 36 percent took job search assistance or some form of support service (JSA/SS).

Table 4
Economic Characteristics of
Local Areas of AFDC Recipients in JTPA Training
(PY 1986)

Economic Characteristics of Local Areas	Number/Percent
Total	6,467/100.0%
Average Unemployment Rate	
Greater Than 7%	50.3
7% or Lower	49.7
Average Earnings	
Greater than \$5,000	27.8
Less than \$5,000	72.2

Table 5 presents data on the first and second activities of those AFDC/JTPA participants who participated in two activities. Two particular patterns of sequencing activities are evident.

One pattern is found among those whose first activity was occupation-specific. Whether they had been enrolled in OCT or OJT, the vast majority received JSA/SS as their second activity (85.6 percent among those who had first taken OCT and 88.9 percent among those who had first taken OJT).

Only a few of those who took OCT or OJT as their first activity subsequently took a second type of intensive training. For example, under 6 percent of those who had been in OCT subsequently enrolled in B/R Ed; it is likely that these women were unable to meet the educational requirements of the occupational training in which they had originally been enrolled. Also, although a useful sequence of activities would be receipt of OCT and then OJT, fewer than 10 percent followed this pattern.

The second clear pattern is found among those whose first activity was B/R Ed. The majority of these participants subsequently took an occupation-specific activity: 56.1 percent subsequently took OCT and just over one fifth subsequently took OJT. Slightly under one quarter received JSA/SS after taking basic/remedial education.

By comparison, there was no obvious pattern of activities among the participants whose first activity was JSA/SS. Almost 40 percent went on to OCT, while almost 30 percent then participated in OJT, and one quarter received a second type of JSA/SS, e.g., the first activity could have been assessment or counselling; the second, job search assistance.

Table 5
 Distribution of AFDC/JTPA Participants
 Who Participated in Two Activities:
 Type of Second Activity By First Activity (a)

First Activity	Total Number	Total Percent	Second Activity			
			OCT	B/R Ed	OJT	JSA/SS
OCT	653	100.0%	0.0	5.7	8.7	85.6
B/R Ed	164	100.0%	56.1	0.0	20.7	23.2
OJT	124	100.0%	7.3	4.0	0.0	88.9
JSA/SS	666	100.0%	38.3	6.9	29.6	25.2

(a) Data are for 11 states. The data base was described earlier in this chapter.

There are various possible explanations for the sequencing among participants who went from JSA/SS to one of the intensive activities. It is possible that some of these women could not be directly placed out of JSA/SS; as a result, they were subsequently enrolled in intensive training. Others may have been enrolled in JSA/SS as a "holding mechanism" until a training slot became available. Still others may have first received counselling; and based on that counselling, they were placed in an intensive activity. Data limitations preclude examining these various possibilities.

Endnotes

1. A Program Year runs from July 1 through June 30. The states are Florida, Georgia, Idaho, Illinois, Indiana, Missouri, Nevada, Oregon, South Carolina, Virginia, and Washington. They have been part of a project sponsored by the National Commission for Employment Policy demonstrating the feasibility and utility of linking JTPA data and Unemployment Insurance (UI) wage record data. See National Commission for Employment Policy, (June 1992).
2. This amounted to 10,381 women. Eliminating those participants who had missing values on control variables produced a sample of 6,467 women on whom the econometric results are based.

AFDC/JTPA participants were eliminated because states could not link their JTPA data with their UI wage records (e.g. social security numbers were inaccurate or incomplete). This accounted for one of the largest groups of excluded participants. Two other groups of women were excluded for the reasons discussed in the text: their status at termination was either "positive, non-job placement" or it was "non-positive" for reasons outside the control of program operators.

Others were eliminated for one of the following four reasons: data on their enrollment or termination dates were missing; they were reported to have been enrolled prior to the third quarter of PY 1984 or have been terminated after the end of PY 1986; they were reported to have spent zero days in JTPA; or they were reported to have spent more than 6 months in an OJT program (6 months was the maximum amount of time permitted under JTPA).

Women who had improbable levels of earnings were also excluded: either more than \$10,000 per quarter or less than \$5.00 per quarter.

Additionally, women were excluded due to missing values on the following variables: labor force status at enrollment, educational status, age, race, limited proficiency in English, head of household, local area unemployment rate, or average annual earnings in local area. Finally, women who were students at the time of enrollment were also omitted.

Unfortunately, it was not possible to determine if the characteristics of the women included in the analysis differed from those who were excluded.

3. This figure is a weighted average of families with members of different ages. It is equivalent to a woman working 50 weeks per year, 35 hours per week at \$5.65 per hour. In PY 1986 the minimum wage was \$3.35 per hour, which for a woman working 50 weeks per year, 35 hours per week, would amount to an annual earnings of \$5,863.

The 1990 Census threshold was selected because it roughly coincides with the outer limit of the two-year post-program period. That is, the last quarter of program termination was quarter 2 (April-June) of 1987. The post-program UI wage record data for all terminees begin in the quarter after termination, which for the last terminees would be quarter 3 (July-September) of 1987. The last quarter of their post-program period is quarter 3 of 1989.

4. Committee on Ways and Means, (1989), Table 27, p. 573.
5. For an overview of the AFDC system, see National Commission for Employment Policy, (October 1991), Appendix A. The state-based figures used in this report are found in Committee on Ways and Means, (March 15, 1989): Table 12 (pp. 546-547) shows states' "Maximum Benefit Level" for a three-person family; Table 11 (pp. 543-545) shows the dollar amounts of states' "AFDC Need Standard" for a three-person family. This need standard was multiplied by 1.85 to determine the Gross Income Limit for each state because "No one with gross income that exceeds 185 percent of the need standard can receive AFDC." (p. 542)
6. In PY 1990 the standard for the 13th week follow-up performance measure, "average weekly earnings of employed welfare recipients," was \$182. This amounts to \$9,100 for a woman who works 50 weeks per year. More detail on the performance measures is given in Chapter 2.
7. As examples, Florida increased its AFDC Need Standard for a three-person family from \$400 per month to \$775 per month between 1987 and 1988. Over the same period, Nevada's monthly Need Standard increased from \$285 to \$550, while Georgia's monthly Need Standard remained steady at \$366 per month, and Oregon's increased slightly (from \$397 to \$412 per month). See Committee on Ways and Means, (March 15, 1989), Table 11, pp. 543-545.
8. A useful example of how these factors affect women's monthly income if they are receiving AFDC versus being employed at various wage rates is found in Welfare Simplification and Coordination Advisory Committee, *Time for A Change: Remaking the Nation's Welfare System*, n.p., (June 1993), Appendix C.
9. These women differed from AFDC/JTPA participants with employment in the prior year along a few characteristics: they were somewhat more likely to be school dropouts, White, and out of the labor force at the time of enrollment.
10. Reasons for the relatively low participation of Hispanics in JTPA were examined in National Commission for Employment Policy, *Training Hispanics: Implications for the JTPA System*, Special Report Number 27, Washington, D.C.: National Commission for Employment Policy, (January 1990). Also, a Commission-sponsored study is examining Hispanic AFDC recipients' participation in JTPA programs (a case study of Texas).
11. This includes teenagers who worked one day as well as adults who were employed full-time, full-year.
12. By comparison, 65 percent of all adult JTPA participants took one activity; 24.6 took two activities, and 10.8 took three or more. John Baj and Charles E. Trott with David Stevens, *A Feasibility Study of the Use of Unemployment Insurance Wage-Record Data as an Evaluation Tool for JTPA: Phase I*, Research Report Number 90-02, Washington, D.C.: National Commission for Employment Policy, (January 1991), p. 58.

■ CHAPTER FOUR: Overview of Post-Program Outcomes

This chapter presents summary data on the post-program outcomes of AFDC/JTPA participants. It begins with the percentages of women who were above the 1990 Census Poverty Threshold for a 3-person family. It then discusses the percentages employed; and for those who were employed, their average annual earnings and the percentages of women whose earnings were sufficient to raise them above the three measures of economic self-sufficiency described in Chapter 3: Maximum AFDC Benefits, Gross Income Limit as well as the 1990 Poverty Threshold.

Before discussing these outcomes, it is important to note both that these women had not worked for at least one year prior to enrolling in JTPA, and that an appropriate assessment of JTPA's effectiveness requires distinguishing between participants whom the JTPA system placed and those whom the system did not place.

1990 Census Poverty Threshold

In brief, of the AFDC/JTPA participants who were placed in jobs,

- 17.6 percent were above the 1990 3-person family Census Poverty Threshold in their first post-program quarter;
- 16.4 percent were above this poverty threshold in their first post-program year; and
- 22.1 percent were above this poverty threshold in their second post-program year.

By comparison, of the AFDC/JTPA participants who left JTPA training prior to placement in jobs,

- 2.0 percent were above the 1990 3-person family Census poverty threshold in their first post-program quarter;
- 2.0 percent were above this poverty threshold in their first post-program year; and
- 7.5 percent were above this poverty threshold in their second post-program year.

Regardless of placement status, the women who were above the poverty threshold in their **first post-program quarter** were not always the ones out of poverty the entire **first post-program year**; and the ones out of poverty in the first post-program year were not always the ones out of poverty the **second post-program year**. Conversely, not all those who were below poverty in the first post-program quarter remained below poverty over the two years.

Nevertheless, movement of the AFDC/JTPA participants into and out of poverty did follow strong patterns, as seen in Figure 1. It should be noted that these figures include women who were not employed as well as those who were.

Not surprisingly, those women **most likely** to remain above the Census Poverty Threshold over the two years had been placed and were above this threshold in their first post-program quarter. Of the women above poverty in the first quarter, almost 70 percent were also above this threshold in their first post-program year; and of these women, almost 80 percent were above poverty in the second year as well.

Also not surprisingly, those women **least likely** to rise above the Census Poverty Threshold had not been placed and they were not above this threshold in their first post-program quarter. Over 98 percent of those below poverty in the first post-program quarter were also below poverty in the first post-program year. Moreover, among these women, 94.1 percent were below poverty in their second post-program year.

Figure 2 focuses solely on the AFDC/JTPA participants who were above poverty in the second year. It shows the percentages who took various paths over time to rise above poverty. Two patterns dominated among the AFDC/JTPA participants who had been placed.

- One pattern, followed by 42.7 percent of the women, was to achieve earnings above poverty in the quarter after placement and to remain there. This is typically considered **the "success" story**.
- The second pattern, followed by 37.8 percent of the women, was to be below poverty not only in the first quarter and but also in the entire year, and then to rise above it by the second year. This is a less well-known "success" story.

In contrast, very few of the AFDC/JTPA participants who had not been placed, but were above poverty in the second year, had followed the "typical success story." Only 9.3 percent had been above poverty in the first post-program quarter and the entire first post-program year. The vast majority only rose above poverty in the second year. Specifically, of those above poverty in the second post-program year, 77.8 percent had been below poverty the first quarter and year.

Figure 1

**Percent of AFDC/JTPA Participants Above Poverty in the
First Post-Program Quarter, First Post-Program Year and
Second Post-Program Year: By Placement Status (a)**

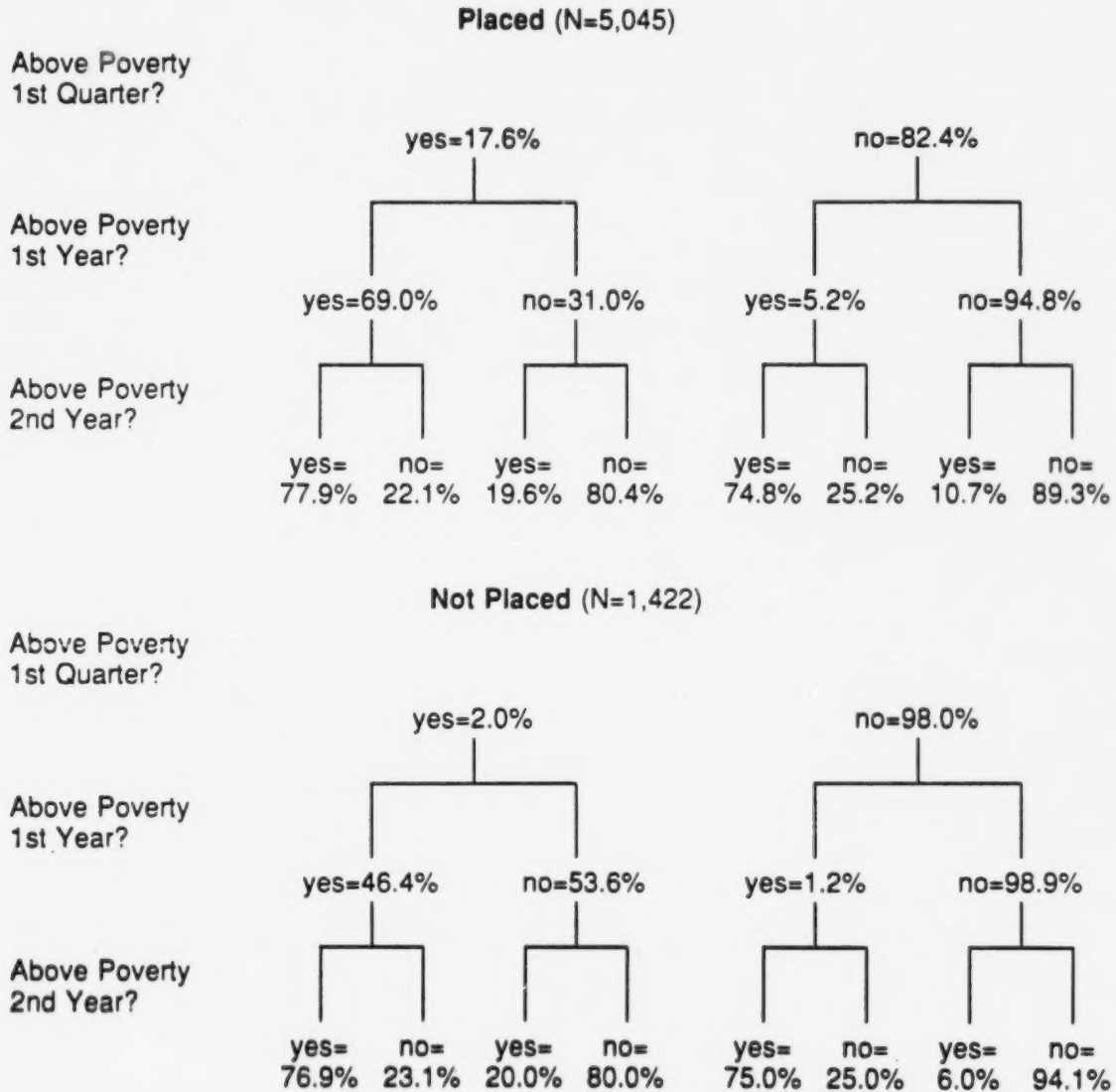
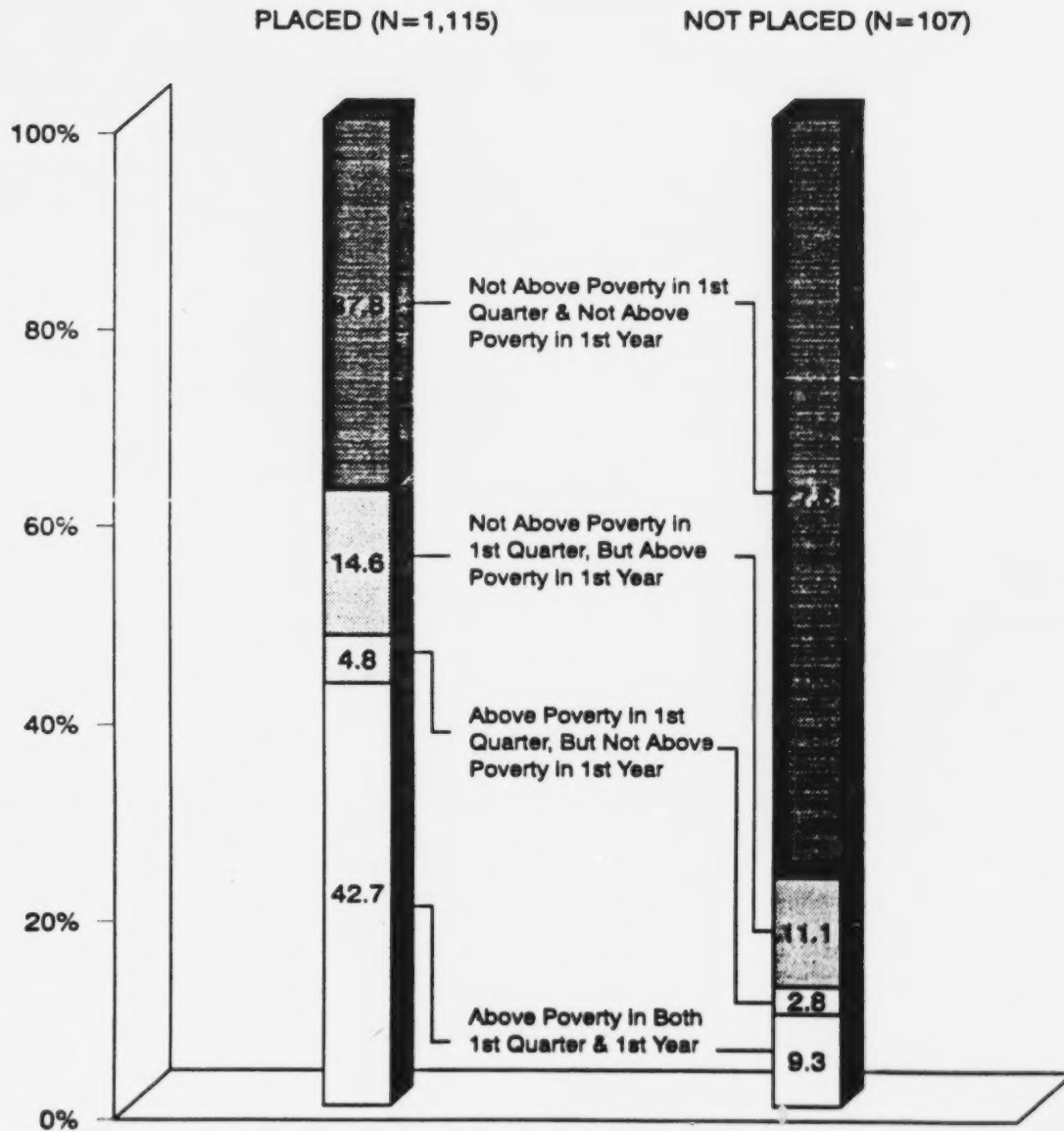


Figure 2

**Paths Taken Over Time By AFDC/JTPA Participants
Who Were Above Poverty In Second Post-Program Year
By Placement Status**



Employment Outcomes

Ninety percent of the AFDC/JTPA participants who were placed also were employed during at least one quarter in the first post-program year. Fifty percent were employed in all four quarters, as shown in Figure 3.

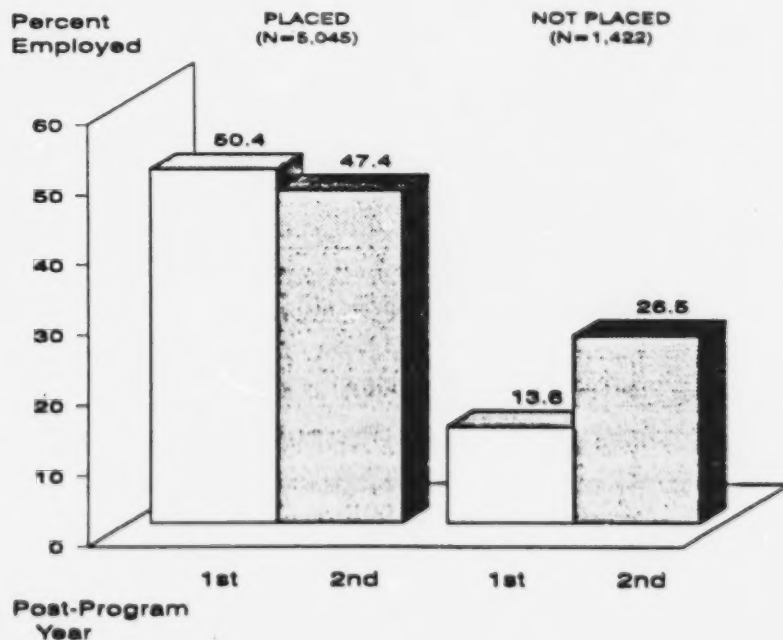
To put these employment rates into perspective, the performance goal for all AFDC/JTPA participants was 51 percent "employed at termination" in the year being examined (PY 1986). It was not until PY 1988 that a longer term goal — "percent employed during the 13th week after program termination" — was established.

Also to lend perspective to the JTPA/AFDC recipients' employment outcomes, the employment rates of a roughly defined comparison group — women without college degrees — were calculated for the states included in the examination. Just over 90 percent of these women were employed at some point during the year and approximately 30 percent were employed full-time, full-year.¹

Employment rates of the AFDC/JTPA participants who had been placed declined in the second post-program year. Eighty percent were employed at least one quarter, a figure lower than the employment rate for non-college women given earlier.

Figure 3

Percent Employed in All Four quarters of a Post-Program Year
By Placement Status: First and Second Post-Program Years



The percentage of AFDC/JTPA participants employed in all four quarters of the second post-program year also declined, although by a considerably smaller amount (3 percentage points) to 47.4 percent.

Overall, it would appear that the JTPA system did well in terms of employment outcomes in the first post-program year for the AFDC/JTPA participants who were placed in jobs. Nevertheless, the system would have to be far more successful in placing AFDC/JTPA participants in "stable jobs" under a "two years and out" program.

The outcomes for the AFDC/JTPA participants who had not been placed contrasted sharply with the post-program employment of those who had been placed. Specifically, only 13.6 percent of the non-placed AFDC/JTPA participants were employed in all four quarters in their first post-program year (Figure 3).

By the second post-program year those not-placed showed increases in the percentages employed, a situation which again contrasted with the experiences of those who had been placed. In particular, just over 70 percent had a job at least one quarter (up from 65 percent in the first post-program year); and 26.5 percent were employed in all four quarters (up from 13.6 percent in the previous year).

These figures suggest that at least some women overcame the problems that led them to leave JTPA training prior to placement and they subsequently entered the workforce. Apparently, the fact that some AFDC/JTPA participants are not placed does not mean that they are "forever" without work, although it does appear that they have a lower likelihood of becoming employed.

Average Annual Earnings and Economic Self-Sufficiency

In the first post-program year, the average annual earnings was \$8,591 for all the AFDC recipients who had been placed and were employed in all four quarters. This was about \$2,000 higher than those who had not been placed in jobs by the JTPA system, but were employed (Figure 4).

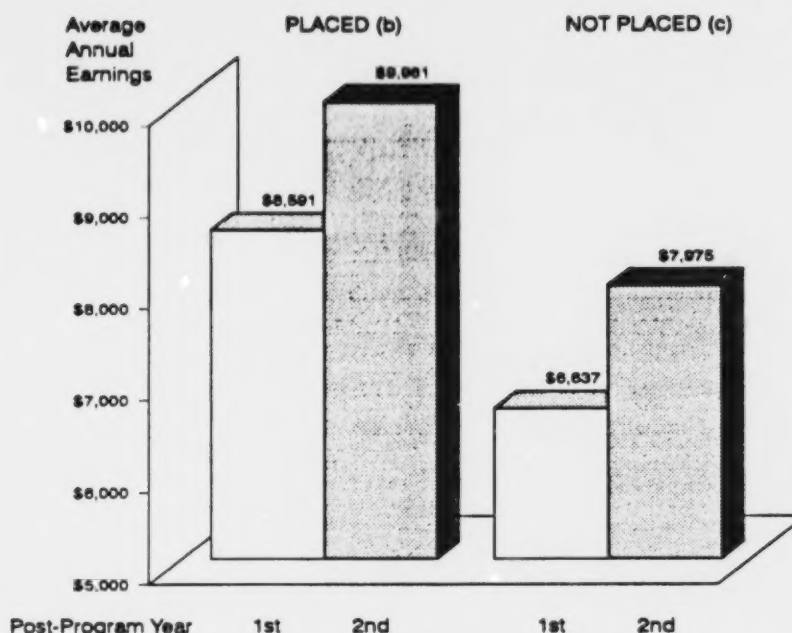
The average annual earnings of both groups of AFDC/JTPA participants were higher in the second post-program year. Those who had been placed averaged about \$1,400 more (\$9,981); among those who had not been placed, their average annual earnings was about \$1,300 higher (\$7,975). This finding suggests there is a pay-off to work experience, regardless of placement from a JTPA activity.

In comparison with these earnings of AFDC/JTPA participants, non-college women, 22 years of age and older, who worked full-time, full-year had an average earnings of about \$16,000.²

Clearly this is a large difference in earnings which merits examination. Although it is beyond the scope of this study to quantify the reasons for it, several, not mutually exclusive, explanations can be suggested.

Figure 4

**Average Annual Earnings by Placement Status:
First and Second Post-Program Years (a)**



(a) AFDC/JTPA participants employed in all four quarters of relevant post-program year.

(b) Sample sizes for those placed: 2,541 (first post-program year) and 2,393 (second post-program year).

(c) Sample sizes for those not placed: 193 (first post-program year) and 377 (second post-program year).

One is that the earnings figures for the AFDC/JTPA participants include women who worked less than full-time, full-year even though they were employed in every quarter.³

A second possible reason may relate to the quality of training the AFDC/JTPA participants received, i.e., they were not trained for reasonably high-paying jobs.

Finally, there are many factors that affect women's earnings for which no adjustments have been made. In this comparison a critical one is work experience: it is well documented that women with more experience also earn more. The AFDC/JTPA participants included in this analysis had no experience in the year prior to enrollment; in contrast, at least some of the non-college women undoubtedly had many years of experience.

Clearly, for purpose of developing policies to assist AFDC recipients, the above information on average annual earnings is not sufficient. It is also important to

know if their earnings are enough to raise the women out of poverty. Thus, the three measures of economic self-sufficiency, described in Chapter 3, were calculated for those women who were employed all four quarters. (The results are shown in Figure 5-A for women who were placed and in Figure 5-B for women who were not placed.)

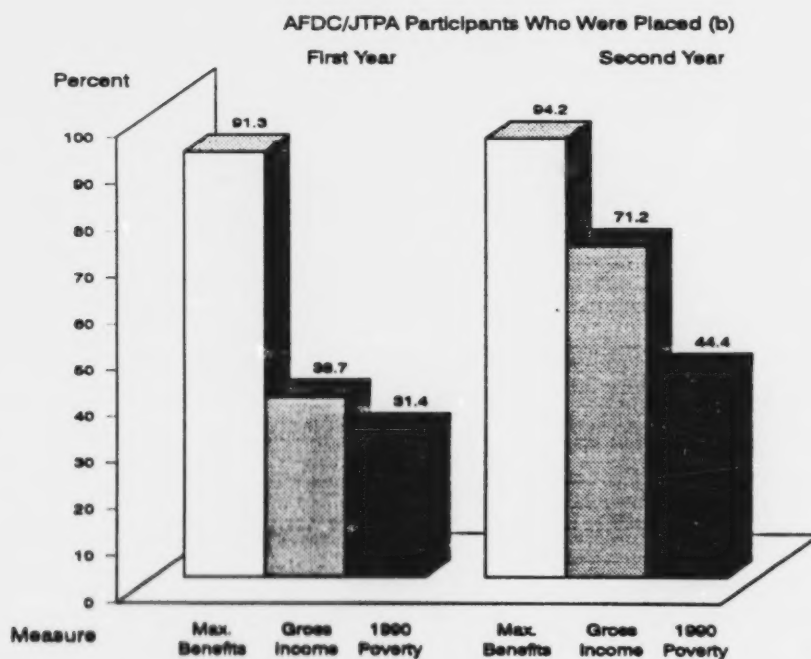
Not surprisingly, due to the low levels of states' "Maximum AFDC Benefits," over 90 percent of the women who had been placed and were also employed in all four quarters during the first post-program year earned more than the Maximum AFDC Benefit Level in their state.

A considerably smaller percentage — 38.7 percent — had annual earnings that put them over the "Gross Income Limit" for their state (an earnings level above which a 3-person family is no longer eligible for AFDC).

A somewhat smaller percentage — 31.4 percent — were over the 1990 Census poverty threshold for a 3-person family.

Figure 5-A

Percent Self-Sufficient by Placement Status:
First and Second Post-Program Years (a)

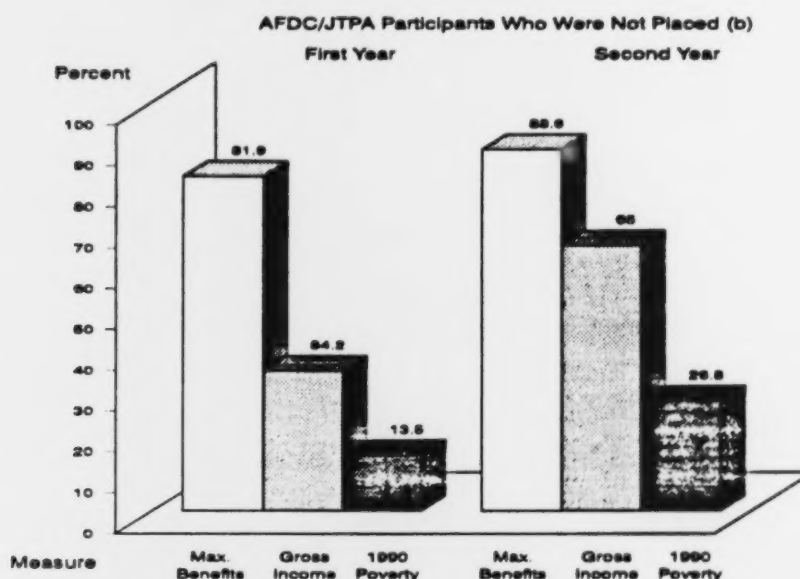


(a) AFDC/JTPA participants employed in all four quarters of relevant post-program year.

(b) Sample sizes for those placed: 2,541 (first post-program year) and 2,393 (second post-program year).

Figure 5-B

Percent Self-Sufficient by Placement Status:
First and Second Post-Program Years (a)



(a) AFDC/JTPA participants employed in all four quarters of relevant post-program year.

(b) Sample sizes for those not placed: 193 (first post-program year) and 377 (second post-program year).

The final point to be made for the first post-program year concerns those whom the JTPA system had not placed. Even though they were employed in all four quarters of the year, these women were less likely to have had earnings that raised them above any of the three measures of economic self-sufficiency. Indeed, only 81.9 percent earned more than the Maximum Benefit Level in their state and only 13.5 percent were above the poverty threshold.

The employed women's higher earnings in the second post-program year, noted earlier, had a pronounced effect on the percentages of women above the three measures of economic self-sufficiency. For the AFDC/JTPA participants who had been placed, 71.2 percent were above their state's Gross Income Limit in the second year (up from 38.7 percent in the first post-program year).

Even the women whom the system had not placed showed a marked increase in the percentage above the Gross Income Limit (65 percent compared to 34.2 percent in the previous year).

What also becomes apparent is that the process of moving the AFDC/JTPA participants who became employed above the 3-person poverty threshold was rather slow, probably due to both the women's lack of work experience and the quality of the training they had received. Between the first and the second post-program

years, there were increases in the percentages of AFDC/JTPA participants, employed all four quarters, who were economically self-sufficient according to this measure — to 44.4 percent among those placed and to 26.8 percent among those not placed. However, the increases were not of the same magnitude as the increases in the percentages above the various states' Gross Income Limit.

In sum, JTPA training programs did move some adult female AFDC/JTPA participants — who had not previously worked for at least a year — out of poverty, although it may have taken two years after they left the program. For a "two years and out" program, much more would be required. A higher percentage would need to be raised above poverty, and at a faster post-program pace, than had occurred in PY 1986. This would necessitate training activities that are of sufficiently high quality to compensate for the women's lack of recent work experience, and prior education and training.

For JTPA training to be effective in a "two and out" program, the system would also need to be able to identify which types of training activities are most likely to lead to "successful" outcomes for AFDC/JTPA participants with different characteristics. This is the topic of the next two chapters.

Endnotes

1. These data are from special runs of the 1986 March Current Population Surveys for the states included in this analysis.
2. The average earnings of women without a college degree who worked less than full-time, full-year in 1986 was about \$8,900. These data are from special runs of the March 1986 Current Population Surveys for the states included in this analysis.
3. The UI wage-record data available for this research do not contain information on the number of hours individuals worked per quarter.

■ CHAPTER FIVE: JTPA Training and Placement: Post-Program Outcomes for AFDC/JTPA Participants

This chapter presents results of multivariate analyses of the AFDC/JTPA participants' post-program outcomes.¹ The primary focus of the analysis was the impact of their training activity in combination with the reason they left the JTPA system (i.e., interaction terms were used).²

Women were coded as having participated in one of four activities. The first three are "intensive activities":

- occupational classroom training (OCT);
- basic/remedial education (B/R Ed); and
- on-the-job training (OJT).

The fourth activity is the stand-alone service of job search assistance and/or support services (JSA/SS).

As noted earlier, the women left JTPA for one of two reasons: (a) they were placed in a job from their last activity; or (b) they left their last activity prior to placement for a reason where program assistance might have made a difference.

The AFDC/JTPA participants who were placed after receiving only job search assistance and/or support services (JSA/SS) are the group against whom the experiences of the others are compared in the multivariate analyses.

By using this particular group as the point of reference, it is possible to analyze two separate aspects of participation in JTPA. One concerns the effects of non-placement from an "intensive" activity (such as, occupational classroom training) compared to placement from a "non-intensive" activity. The question is:

Were the AFDC/JTPA participants who left an intensive activity prior to placement **less** likely to have positive post-program outcomes than those who were placed after receiving JSA/SS?

The second aspect of participating in JTPA concerns the effects of the intensive training activities themselves. Here the question is:

Were the AFDC/JTPA participants who were placed from an intensive activity **more** likely to have positive post-program outcomes than those who were placed from JSA/SS?

Before presenting these results, this chapter describes the non-experimental approach taken in the analyses. Findings are also presented on the extent to which the characteristics of the AFDC/JTPA participants were related to their (non)placement from JTPA's training activities.

Non-Experimental Approach in this Report

Most assessments of training programs for AFDC recipients have used individual-level data and have been experimental in nature, as discussed in Appendix A. While an alternative — non-experimental — approach using individual-level data is possible, it has not been used in recent years, largely because the approach had produced inconsistent results in early studies. Subsequent methodological advances, and improved data collection efforts, have made possible more widespread application of this approach.³

One non-experimental approach is to use statistical techniques to identify an "external comparison" group — individuals who did not participate in training but for whom there is information in an already existing data file (such as registrants with the Employment Service). The comparison group is analogous to an experiment's control group: it becomes the reference group against which the post-program employment and earnings of program participants are assessed. The results are the **estimated net impacts** of the treatment.

A second non-experimental approach, and the one used in this report, is to identify an "internal reference" group. In this case, all individuals being examined are in the "treatment group." They are differentiated by the type of treatment they received. A group who received a particular type of treatment becomes the reference group against which the other groups are compared. The results are the **estimated relative impacts** of receipt of one type of treatment versus another.

Both of these non-experimental approaches ought to test for the possibility of "selectivity bias" due to characteristics of the participants that cannot be observed by evaluators. Results of these tests are then taken into account in the empirical examinations of post-program employment and earnings. The goal is to develop estimates of program impacts that parallel use of a randomly assigned control group in experiments.⁴

If a selectivity bias exists, and no adjustments are made for it, then it may be difficult to interpret clearly results based on non-experimental techniques. For example, one unobserved characteristic is a participant's motivation to work. Suppose that participants in OJT are not only more motivated to work, but also are

found to have more successful post-program outcomes, than those who participate in OCT. Then it would be unclear whether their greater post-program success was due to participation in OJT or to their motivation to work.

Testing for the possibility of selectivity bias involves determining if individuals' employment and earnings **prior** to program entry are related to their **subsequent** training activities and job placement status. If systematic relationships appear, then estimates of the effects of training (or placement) on post-program outcomes would be biased if no further statistical adjustment is made.⁵

It was not possible here to test fully for selectivity bias. The methods developed to address this problem require that at least some of the individuals being studied have pre-program employment and earnings, as just noted. However, the AFDC/JTPA participants in this examination have been purposefully restricted to those who had no employment in the year prior to enrollment (the only pre-program year for which data are available).

Preliminary analyses, which combined AFDC/JTPA participants who had pre-program work experience with those who did not have such experience, were undertaken to test for the relationship between pre-program employment and subsequent training and job placement. Results indicated that assignment to a training activity was not related to the number of quarters the AFDC/JTPA participants had been employed prior to enrollment and that job placement was only weakly related to their prior employment.⁶

Given those results, analyses of post-program outcomes were undertaken to ascertain if potential biases due to job placement could be reduced by making the necessary statistical adjustment. Results indicated that this adjustment did not contribute to the explanatory power of the analysis.⁷

Nonetheless, because this study could not test completely for selectivity bias that might arise from the AFDC/JTPA participants' **unobserved** characteristics, the statistical relationships between the women's **observed** characteristics and their placement from the various training activities are discussed below.⁸

Findings on the Relationship Between the Characteristics of AFDC/JTPA Participants and their Placement from Training Activities

A priori, differences would be expected in the characteristics of the AFDC/JTPA participants who participated in, and were placed from, different training activities. As indicated in Chapter 2, "who takes which activities" depends upon decisions that are made jointly by the participants and the JTPA service providers. In their discussions, participants express their preferences and the providers weigh those preferences against their own assessments of the participants' education, work experience and general "job readiness," as well as the types of available training slots and the conditions of the local labor market.

In addition, differences in "who is placed" would be expected *a priori*. One reason for differences relates to the participants' personal characteristics, some of which are observed, such as their educational background; while others are unobserved, such as their motivation to work.

A second reason for differences in "who is placed" relates to the type of training which the participants received. "Type" includes not only whether the training was occupational classroom or basic/remedial education, for example, but also its quality and relevance to demand in the local labor market.

Finally, "who is placed" depends upon the extent to which local training providers undertake — and are successful in — job development. JTPA providers must make trade-offs between the use of funds for training, support services, and job development. Moreover, their decisions regarding these trade-offs are likely to depend upon their localities' unemployment rates and the extent to which there is competition from other job developers, such as from the local public employment service. For example, the higher the unemployment rate — or the greater the competition — the greater the amount of resources that may be needed to identify job openings for JTPA participants.

Presumably, the "easiest to place" individuals at enrollment would most likely go directly to JSA/SS, without further training. This would be the most efficient use of JTPA resources, especially since "Cost per Entered Employment" was one of the system's performance measures for adults during the period under examination.

Empirical results suggest that AFDC/JTPA participants placed from OCT did not differ along observed personal characteristics, such as age, education, or race/ethnicity, compared to all AFDC/JTPA participants.⁹ However, they were more likely to reside in local areas with low unemployment rates and low average earnings, i.e., local areas where job development/placement would be relatively easy for women with few skills.

Those placed from B/R Ed were also more likely than all other AFDC/JTPA participants to live in local areas with low unemployment rates and low average earnings. As important, they were more likely to be school dropouts, Black (rather than White), and out of the labor force at the time of enrollment (rather than unemployed).

Along some dimensions, the AFDC/JTPA participants placed from OJT appeared to be easier to place than the other women: they were more likely to be high school graduates (than dropouts) and to be proficient in English.

However, on other dimensions, they may have been less easy to place: they were more likely to have been out of the labor force at the time of enrollment (rather than employed) and over age 36 (rather than between 22 and 35 years). While being older, rather than younger, could signal "maturity" (a desirable trait in the workplace), for these women being older could also signal a greater number of years without employment. They may be leaving AFDC primarily because their youngest child turned age 18. OJT could have been used to overcome their relative lack of work experience. Finally, the women placed from OJT were more likely than all other AFDC/JTPA participants to have been Black (rather than White).

The women who left prior to placement differed from all other AFDC/JTPA participants along several characteristics. They were more likely to be proficient in English and to be Black (rather than White). As important, these women too were more likely to have been out of the labor force at the time of enrollment (rather than employed). Also, they were more likely to reside in areas with low unemployment rates and high average earnings.

In sum, of all the AFDC/JTPA participants, those placed from B/R Ed would appear to have been the least likely to achieve successful post-program outcomes. They had relatively weak educational backgrounds, and also reported that they were "out of the labor force" at the time of enrollment.

Findings on the Relationship Between JTPA Training/Placement and Stable Employment Among AFDC/JTPA Participants

Stable employment would be a key outcome expected from efforts to move AFDC recipients "into the workforce." As a result, the post-program employment outcomes examined here were: employed in all four quarters during the first post-program year and the second post-program year.¹⁰

Of the AFDC/JTPA participants who were placed from JSA/SS — the reference group for the multivariate analysis — 46 percent were employed in all four quarters of the first post-program year; 44 percent were so employed in the second post-program year.¹¹ (See the top panel of Table 6.)

For ease of interpretation, the results of the multivariate analyses have been grouped as follows:

- The relative effects of training in — and placement from — an intensive activity, compared to placement from JSA/SS. They may be interpreted as the effect of training, given that the women were placed in jobs. (See Row #1 in Table 6.)
- The relative effects of non-placement from JSA/SS, compared to placement from JSA/SS. They may be interpreted as the effect of job placement. (See Row #2 in Table 6.)
- The relative effects of training in — but non-placement from — an intensive activity, compared to placement from JSA/SS. They may be interpreted as the effect of training, given that the women were not placed in jobs. (See Row #3 in Table 6.)

Table 6

Relative Effects of Training In — and Placement from —
 An Intensive Training Activity; Non-Placement from JSA/SS; and
 Training in — But Non-Placement From — an Intensive
 Training Activity on Employment in all Four Quarters,
 First and Second Post-Program Years

Training and Placement	First Post-Program Year	Second Post-Program Year
% Placed from JSA/SS Who Were Employed in all Four Quarters	46%	44%
Estimated Relative Effects, Compared to Placement from JSA/SS (a)		
1. Training in and Placement from—		
OCT	+ 8***	+ 5***
B/R Ed	- 6*	- 3
OJT	+ 9***	+ 6***
2. Non-Placement from JSA/SS	-41***	-16***
3. Training in, but Non-Placement from—		
OCT	-38***	-19***
B/R Ed	-43***	-16***
OJT	-37***	-20***

(a) The figures are the changes in the probability of full-year employment, relative to placement from JSA/SS, associated with the training/placement variables. The logit models on which these changes are based are shown in Appendix Table C-2.

- * = significant at the 10 percent level.
- ** = significant at the 5 percent level.
- *** = significant at the 1 percent level.

Sample size = 6,467.

Training and Placement

A strong positive relationship was found between placement from two of the three "intensive" training activities and employment in the first post-program year. Specifically, women who had been placed from both OCT and OJT were more likely to have been employed all four quarters than those who had been placed from JSA/SS.¹²

It should be recalled that these findings have "controlled for" the women's observed characteristics. Thus there is a strong indication that these training activities had an impact on post-program employment over and above job placement.

The positive findings regarding OCT and OJT for employment in all four quarters of the first post-program year were also found for the second post-program year, although there was some decay. For example, in the first year the AFDC/JTPA participants who were placed from OJT were 9 percent more likely to be employed than those placed from JSA/SS. By the second year, they were 6 percent more likely to be employed all four quarters.

As a final point on these two training activities, it is worth noting that the estimated impacts of placement from OCT and from OJT were quite similar. (They were 8 percent and 9 percent, respectively, in the first post-program year; and 5 percent and 6 percent, respectively, in the second post-program year.) If the costs of the two training activities could be determined, then it would be possible to estimate their relative cost-effectiveness at various levels of OCT and OJT use.

The employment outcomes of women who were placed from the third of the three intensive activities — B/R Ed — contrasted sharply with those just discussed for OCT and OJT. These women were *less* likely to have been employed all four quarters than those placed from JSA/SS. It would appear that this activity, by itself, was not sufficiently strong to overcome the greater "barriers to employment" found at enrollment among the B/R Ed participants compared to the other AFDC/JTPA participants.

Training and Non-Placement

The critical role that job placement plays in assisting AFDC/JTPA participants become, and remain, employed all four quarters of a post-program year is demonstrated by findings for the women who were *not* placed.

First, those who left JSA/SS prior to placement were 41 percent less likely to be employed all four quarters in the first post-program year than those who had been placed from this activity.

In addition, the AFDC/JTPA participants who left the three intensive activities prior to placement were also less likely to be employed all four quarters of the first post-program year than those who had been placed from JSA/SS. For example, the OCT participants who had not been placed were 38 percent less likely — and the OJT participants who had not been placed were 37 percent less likely — to have been employed all four quarters than those placed from JSA/SS.

At the same time, it should be noted that the size of the negative impact of non-placement from OCT and OJT was smaller than that for non-placement from JSA/SS, e.g., -38 for non-placement from OCT, compared to -41 for non-placement from JSA/SS. This indicates that participation in both OCT and OJT had positive effects, but that they were swamped by the negative effect of non-placement.

The finding that the relative impact of non-placement from B/R Ed was greater than that of non-placement from JSA/SS (-43 versus -41 in Table 6) further strengthens the earlier finding that B/R Ed is not sufficient to overcome the greater barriers to employment found among AFDC/JTPA participants in this program.

Fortunately, the magnitude of the negative relationship between non-placement and post-program employment declined between the first and second post-program years. That is, the likelihood that women who had **not** been placed would also **not** be employed all four quarters fell, compared to those who had been placed from JSA/SS. For instance, while those not placed from OCT were 38 percent less likely to be 4-quarter employed in the first year than those placed from JSA/SS, in the second year this figure had dropped to 19 percent.

Two interpretations of these results on placement versus non-placement are possible. One is that straight-forward job placement is more likely to lead to subsequent "4-quarter" employment than receipt of intensive training, without subsequent job placement. An alternative interpretation is that the AFDC/JTPA participants who left prior to being placed in a job did so for reasons that also adversely affected their likelihood of becoming and remaining employed, e.g., a family problem. It was not possible to test these competing hypotheses.

Findings on the Relationship Between JTPA Training/Placement and "4-Quarter Employed" AFDC/JTPA Participants Rising Above the Poverty Threshold

The relationship between JTPA training and placement and AFDC/JTPA participants' likelihood of being above poverty was examined for a subset of the data: **those women who were employed all four quarters during the relevant year.**¹³ Analogous to the previous discussion, the AFDC/JTPA participants who were placed from JSA/SS, (and were employed in all four quarters) formed the reference group for the multivariate analysis. Almost one quarter were above poverty in the first post-program year, and one third were above poverty in the second post-program year.¹⁴ (See the top panel of Table 7.)

Table 7

Relative Effects of Training In — and Placement from —
 An Intensive Training Activity; Non-Placement from JSA/SS; and
 Training in — But Non-Placement From — an Intensive
 Training Activity on the Probability of Being Above
 the 1990 Poverty Threshold for a 3-Person Family,
 First and Second Post-Program Years (a)

Training and Placement	First Post-Program Year	Second Post-Program Year
% Placed from JSA/SS Who Were Above the Poverty Threshold	26%	33%
Estimated Relative Effects, Compared to Placement from JSA/SS (b)		
1. Training in and Placement from—		
OCT	+ 8***	+11***
B/R Ed	+14***	+16***
OJT	+ 7***	+12***
2. Non-Placement from JSA/SS	-22**	-16**
3. Non-Placement from—		
OCT	-11*	+ 3
B/R Ed	- 6	- 2
OJT	-20	-23**

(a) The AFDC/JTPA participants were employed all four quarters.

(b) The figures are the changes in the probability of being above the poverty threshold, relative to placement from JSA/SS associated with the training/placement variables. The logit models on which these changes are based are shown in Appendix Table C-3.

* = significant at the 10 percent level.

** = significant at the 5 percent level.

*** = significant at the 1 percent level.

Sample size = 2,734 for the first post-program year.

Sample size = 2,770 for the second post-program year.

Training and Placement

A strong positive association was found between placement from each of the three intensive activities and the likelihood of being above poverty, compared to placement from JSA/SS. Thus, placement from either OCT or OJT was associated not only with a higher likelihood of 4-quarter employment, but also among those so employed, a higher likelihood of being above poverty.

Specifically, in the first post-program year, women placed from OCT were 8 percent more likely, on average, to be above poverty than those who had been placed from JSA/SS. Moreover, the evidence suggests that the positive effect of placement from OCT continued over time. In the second year, these women were 11 percent more likely to be above poverty than those placed from JSA/SS.

OJT with placement was comparable to placement from OCT: women placed from OJT were 7 percent more likely to be above poverty in the first post-program year — and 12 percent more likely in the second post-program year — than those who had been placed from JSA/SS.

Although women placed from B/R Ed were less likely to be 4-quarter employed than those placed from JSA/SS, among those who did become so employed, placement from this training activity was associated with a higher likelihood of being above poverty. Indeed, these women experienced a dramatic improvement in their economic status, compared to their counterparts placed from JSA/SS: they were 14 percent more likely to be above poverty in their first post-program year and 16 percent more likely in the second post-program year.

Training and Non-Placement

The question of whether there were differences between the placed and non-placed women in terms of their rising above the poverty threshold is most appropriately answered by focusing on the second, rather than the first, post-program year. The reason is that the women who found jobs on their own needed a longer period of job search than those who were placed from JSA/SS.

The negative association between non-placement from JSA/SS and post-program employment repeated itself in analyses of the likelihood of being above poverty. Among the AFDC/JTPA participants who were employed in all four quarters, those who had not been placed from JSA/SS were 16 percent less likely to be above poverty in the second post-program year, compared to women who had been placed from this activity. This suggests that among the women who became employed, the jobs they obtained after only receiving JSA/SS appear to have offered more opportunities for rising above poverty than the jobs their counterparts obtained without this minimal assistance.

While in terms of employment outcomes, the negative association with non-placement swamped the positive effects of training, similar results were not found systematically for the outcome "above poverty" among those who were employed. There is a hint from the findings that the positive effects of participation in OCT and B/R Ed began to overcome the negative effects of non-placement by the second

post-program year. For example, the participants of OCT, who had not been placed but were employed, were 11 percent less likely to be above poverty than those placed from JSA/SS (a statistically significant result). But in the second post-program year, the difference between the two groups of women was not statistically significant. There is also a hint that the positive effects of participation in OJT declined considerably. However, these findings are at best suggestive; several additional years of post-program data would be needed before any firm conclusions could be drawn.

In sum, compared to placement from JSA/SS, placement from both OJT and OCT were effective for adult AFDC/JTPA participants who had not worked in the year prior to enrollment. Placement from these activities was associated with a higher likelihood of 4-quarter employment in both post-program years, compared to placement from JSA/SS. In addition, among those women who were employed in all four quarters, placement from OJT and OCT was associated with a greater likelihood of being above poverty in both post-program years as well.

Of course, not all women participated in, or were placed from, these two activities. For example, dropouts were more likely than graduates to have been placed from B/R Ed. Enrolling dropouts in B/R Ed may have seemed like the most reasonable course of action based on their perceived barriers to employment at the time of enrollment. But was it also the most reasonable course of action based on their likelihood of successful post-program outcomes? The next chapter considers the question: did AFDC/JTPA participants who have different characteristics experience different post-program outcomes from the various training activities?

Endnotes

1. The personal and local area characteristics described in Chapter 3 were used as control variables, in addition to variables representing the quarter of the year in which the women left training and the state in which they resided. The definitions of the variables are in Appendix B; the results of the multivariate models in this chapter are in Appendix C.
2. The training/placement variable was constructed as follows. Women who took only one activity were coded according to both the activity and their placement status. For women who took two or more activities, the following rules were applied. (a) Where one activity was "intensive" and the other was JSA or a support service, the women were coded according to the type of intensive activity in which they participated as well as their placement status. (b) Where all activities were "intensive," the women were coded according to the last activity in which they participated as well as their placement status. (c) Where all activities were job search assistance or some support service, the women were coded as receiving "JSA/SS" as well as by their placement status.
3. See James Heckman and V. Joseph Hotz, "Choosing Among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case Study of Manpower Training," *Journal of the American Statistical Association*, Volume 84, Number 408, (December 1989), pp. 862-880. See also the discussion in Bowman, (June 1993), Appendix B, pp. 89-95. For a non-experimental approach using aggregate data, see O'Neill, (1990).
4. See Appendix A for a further discussion of selectivity bias and see Bowman, (June 1993), for a discussion and application of techniques for adjusting for it.
5. For example, suppose that individuals who entered on-the-job training were found to have had higher earnings before enrollment than individuals who entered basic/remedial education. Furthermore, participants of on-the-job training were found to have had higher post-program earnings as well. In this case, the results on post-program earnings would be biased: on-the-job training would appear to be more effective than it is in reality due to the characteristics of the individuals enrolled in it.
6. The training variables were statistically insignificant and the placement variable was not quite significant at the 10 percent level.
7. Specifically, the factor designed to correct for the correlation between the job placement variable and the error term of the equation was statistically insignificant. James Heckman, "Sample Selection Bias as a Specification Error," *Econometrica*, Volume 47, (January 1979), pp. 153-161.
8. In this study training assignment and placement are treated as independent services that are provided to JTPA participants. Ideally, it would have been desirable to examine the following sequential process: participation in an activity (and the sequencing of activities if more than one were undertaken), and then placement status, conditional upon the training activity. However, such an undertaking requires a complex econometric model, involving specification and computational issues that could not be addressed within the scope of this study.

9. Results of the multinomial logit are in Appendix Table C-1.
10. Specifically, the women experienced positive earnings in the UI-covered sector in each of the four quarters in the relevant post-program year.
11. As noted in Chapter 4, approximately half of all the AFDC/JTPA participants who had been placed were employed in all four quarters of the first and second post-program years. Of those who had not been placed by the JTPA system, approximately 13 percent were so employed in the first post-program year; and in the second post-program year, about 25 percent were employed in all four quarters.
12. An OJT placement may mean that the participant stayed with the OJT employer; it may also mean that she was placed with another employer after receiving OJT.
13. Of the women employed in all four quarters of the second post-program year, approximately 70 percent had also been employed each and every quarter in the first post-program year; about 25 percent had been employed between one and three quarters; fewer than 5 percent had not been employed in any quarter of the first post-program year.
14. As noted in Chapter 4, just over 30 percent of all the AFDC/JTPA participants who had been placed and were employed in all four quarters of the first post-program year were above poverty; by the second year, 44 percent were above poverty. Among those who had not been placed by the JTPA system, but were employed all four quarters, approximately 13 percent were above poverty in the first year; and just over 25 percent were above poverty in the second year.

■ CHAPTER SIX: JTPA Training and Placement: What Works Best for Whom?

This chapter presents findings on the relative effectiveness of placement from various JTPA activities on the post-program outcomes of AFDC/JTPA participants of different ages, educational backgrounds, and race/ethnicity. The intent is to assist training providers by suggesting which activities appear to "work best" for AFDC/JTPA participants with different characteristics.

The findings are important to JTPA training providers for two related reasons. First, providers are responsible for recommending particular training activities to participants. To date they have had to rely largely on their own judgements about various alternatives, based on their knowledge of their local labor markets and the participants' own preferences. This study provides a broader base of information.

Second, training providers are held accountable for the participants' subsequent labor market outcomes. Their performance goal in the case of adult AFDC recipients in general was "employment at program termination" during the period under examination. Specifically, the nationwide standard was an "Entered Employment Rate" of 51 percent. At the same time, they were aware that the "Cost per Entered Employment" performance standard was intended to limit JTPA expenditures per adult participant.¹

The relevance of these findings will be even greater if the JTPA system becomes part of a "two years and out" welfare program. It would be essential for the training providers to increase the AFDC/JTPA participants' likelihood of employment; and if they are employed, of raising them above poverty.

As in the previous chapter, findings for two post-program outcomes are discussed.

- The likelihood of employment in all four quarters of the relevant post-program year. The reader is reminded that this outcome is for all adult female AFDC/JTPA participants who had not worked in the year prior to enrollment.
- The likelihood that the "4-quarter employed" AFDC/JTPA participants were above the 1990 Census poverty threshold for a three-person family, i.e., they earned at least \$9,885 per year.

Characteristics of Subgroups of AFDC/JTPA Participants

The particular subgroups of AFDC/JTPA participants selected for analysis were chosen on the basis of programmatic concerns rather than statistical considerations. In broad terms, the women were differentiated using the characteristics included in the "job readiness index" developed by the General Accounting Office in its influential report on JTPA.² Specifically, the AFDC/JTPA participants were stratified according to the following characteristics:

- **age** — women between 22 and 35 years of age, and those age 36 or older;³
- **education** — school dropouts, and high school graduates without additional education;⁴ and
- **race/ethnicity** — Whites, Blacks, and Hispanics.⁵

The original goal was to have twelve groups, each of which would be examined separately (e.g., White dropouts under 36 years of age, Black dropouts under 36 years of age, etc.) However, sample size limitations necessitated the particular stratifications by age, education, and race/ethnicity that are shown.

Findings on Post-Program Outcomes for Subgroups of AFDC/JTPA Participants

Table 8 summarizes the results of the multivariate analyses.⁶ The rows indicate the subgroups for whom separate empirical examinations were undertaken; the columns indicate placement from the various training activities. In all models, women from the particular subgroup who were "placed from JSA/SS" comprised the reference group against which the women from the various "placement/training activities" were compared.⁷

In the table, "Emp" refers to the post-program outcome of "employed in all four quarters of a post-program year" (Year 1 or Year 2). "Pov" refers to the post-program outcome of "earnings sufficiently high that the women, employed in all four quarters, were above poverty in a post-program year" (again, Year 1 or Year 2).

An arrow pointing up indicates that the relative effect of the training activity was positive and statistically significant (at the 10 percent level or higher) for the particular subgroup. Conversely, an arrow pointing down indicates that the relative effect of the training activity was negative and statistically significant (at the 10 percent level or higher) for the particular subgroup. If no arrow is shown, then the training activity had no statistically significant impact on the post-program outcome for the subgroup, compared to placement from JSA/SS.

Table 8

Relative Effectiveness of Placement from OCT, B/R Ed, and OJT
Compared to Placement from JSA/SS for Age, Education and
Race/Ethnic Subgroups of AFDC/JTPA Participants (a)
(PY 1986 Terminees)

Subgroup	Placed from					
	OCT		BR/Ed		OJT	
	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
Age 22-35						
White Graduates	↑	Emp Pov	↑	↓	Emp Pov	↑
Black Graduates	↑	Emp Pov	↑	↑	Emp Pov	↑
White Dropouts	↑	Emp Pov	↑	↑	Emp Pov	↑
Black Dropouts		Emp Pov		Emp Pov	↑	Emp Pov
Age 36 or Older						
Graduates		Emp Pov	↑	Emp Pov	Emp Pov	↑
Dropouts		Emp Pov	↓	Emp Pov	↑	Emp Pov
Whites		Emp Pov		Emp Pov	Emp Pov	↑
Blacks	↑	Emp Pov		Emp Pov	↑	Emp Pov
Hispanics	↑	Emp Pov	↑	Emp Pov	↑	Emp Pov

- (a) "Emp" refers to the likelihood of employment in all four quarters of a post-program year, compared to those placed from JSA/SS, for all AFDC/JTPA participants. "Pov" refers to the likelihood of being above poverty in a post-program year, compared to those placed from JSA/SS, among AFDC/JTPA participants employed in all four quarters of a post-program year.

(↑ = greater; ↓ = lower).

Occupational Classroom Training

The previous chapter showed that among all the AFDC/JTPA participants, placement from OCT (compared to placement from JSA/SS) was associated with not only a higher likelihood of employment and but also, among those who were employed, a higher likelihood of being above poverty. Findings here suggest that placement from OCT, compared to JSA/SS, appears to have been effective for several, but not all, subgroups of AFDC/JTPA participants. Moreover, the type of impact differed among the subgroups for whom placement from OCT was effective. These findings are important because they suggest the need for careful matching between type of training and the characteristics of AFDC/JTPA participants.

High school graduates between the ages of 22 and 35 appeared to benefit the most from an OCT placement in the sense that the relative effect of this type of training and placement lasted through both their first and the second post-program years. However, the particular benefits differed sharply between the White and Black graduates.

- Blacks placed from OCT were more likely to be employed in **both** the first and the second post program years than their counterparts placed from JSA/SS. However, among those who were so employed, there was no difference between the two groups in their likelihood of being above poverty.
- By comparison, among Whites, there was no difference between the two groups in their likelihood of being employed. However, among those who were employed, Whites placed from OCT were more likely to be above poverty in **both** the first and the second post-program years than those placed from JSA/SS.

Clearly, for JTPA training providers to be effective in a "two years and out" welfare program, the OCT training (and placement) they offer will have to be of a higher "quality" than in PY 1986. Higher quality training and placement for the younger Black graduates means a stronger focus on earnings; it means a stronger focus on employment for the younger White graduates.

The older AFDC/JTPA high school graduates also appeared to benefit more by being placed from OCT than JSA/SS, although in the second post-program year. In that year, those placed from OCT had a higher likelihood of being above poverty than those placed from JSA/SS.

Finally, the relative benefits of an OCT placement compared to a JSA/SS placement were short-lived for other groups.

- Both Hispanics and the younger group of White school dropouts had a higher likelihood of 4-quarter employment in the first post-program year; and among those who were employed, a higher likelihood of being above poverty as well.⁸
- Older Black women had a higher likelihood of 4-quarter employment in the first post-program year.

Basic/Remedial Education

In reviewing findings on the subgroups placed from B/R Ed, the reader should recall that the women placed from this activity were more likely to have been school dropouts (rather than graduates) compared to all the other AFDC/JTPA participants. In addition, placement from B/R Ed was associated with a lower likelihood of being employed all four quarters in the first post-program year. However, those who were employed all four quarters had a much higher likelihood of being above poverty than their counterparts placed from JSA/SS.

The earlier result — that women placed from B/R Ed were less likely to be employed all four quarters in the first post-program year — appears to have been due to the experience of one group: younger White high school graduates. It is unlikely that this activity had a negative impact on these women, compared to placement from JSA/SS. Rather, the fact that high school **graduates** were assessed at enrollment as needing B/R Ed was surely a signal of the "barriers to employment" that they were experiencing.

In contrast, Hispanic women placed from B/R Ed were more likely to become 4-quarter employed than their counterparts placed from JSA/SS.⁹ However, this occurred in their second post-program year.

As noted above, earlier results for all employed AFDC/JTPA participants showed that placement from B/R Ed was associated with a higher probability of being above poverty in **both** post-program years than placement from JSA/SS. Results for the subgroups show that these results were due to the different experiences of the younger and older women.

For the younger AFDC/JTPA participants who were employed in all four quarters, placement from B/R Ed increased the likelihood of being above poverty in the first post-program year, compared to those placed from JSA/SS. It had no such effect in the second year. This short-term impact occurred not only among White school dropouts but also among Black high school **graduates** (and Hispanics).

In contrast, the relative effect of placement from B/R Ed on the older women, who were employed all four quarters, occurred with a lag. It was in the second post-program year that both school dropouts and Blacks placed from B/R Ed had a higher likelihood of being above poverty than those from JSA/SS. This lagged effect parallels that of placement from OCT.

Thus, the relative advantage associated with placement from B/R Ed, compared to placement from JSA/SS, declines over time for younger AFDC/JTPA participants, but may increase over time for the older ones. This particular result is puzzling, but a few possible explanations may be offered. One is that the relative advantage of this training "peaks" in the second year for older women, and then begins to decay in a manner similar to that of the younger women. Alternatively, it may be that the effect continues for older women simply because of their age. Perhaps they are more motivated to work because their children are over age 18 and AFDC is no longer an option. Alternatively, perhaps they **can** work more hours because they are not constrained by child-care problems. Additional years of post-program UI wage records would be necessary to shed light on this puzzle.

On-the-Job Training

OJT with placement appears to have been the most helpful training service for younger school dropouts. Both White and Black school dropouts placed from OJT were more likely to be employed all four quarters in both post-program years than their counterparts placed from JSA/SS. In addition, among those who were employed, it raised the relative likelihood that Blacks would be above poverty through the second post-program year and that Whites would be above poverty in the first post-program year.

For the younger White high school graduates, OJT with placement was similar to OCT in its relative effectiveness. That is, while there was no employment effect (compared to placement from JSA/SS), it was associated with a higher likelihood that those employed all four quarters would be above poverty in both the first and the second post-program years.

The relative effectiveness of OJT with placement was rather limited for Hispanics and younger Black high school graduates. It only raised their relative likelihood of 4-quarter employment in the first post-program year, and had no relative impact on their likelihood of being above poverty if they were employed.

Among the older women, OJT with placement (relative to placement from JSA/SS) raised the likelihood of 4-quarter employment in the first post-program year for Blacks. Among the older Whites and high school graduates who were employed, OJT with placement was associated with a greater likelihood of being above poverty in the second post-program year. Thus again, to the extent that training and placement assist older employed AFDC/JTPA participants in moving above poverty, the effect occurs with a one-year lag.

In sum, while it is apparent that the various training activities affect different groups in different ways, a few patterns emerge for this sample of AFDC/JTPA participants. Compared to direct placement from JSA/SS,

- Placement from either OCT or OJT can help White high school graduates between 22 and 35 years of age, who are subsequently employed in all four quarters of a post-program year, rise above poverty. It does not necessarily assist them in becoming employed all four quarters of a year.
- Conversely, placement from OCT can help Black high school graduates between 22 and 35 years of age become employed all four quarters. It does not necessarily assist those who become 4-quarter employed in rising above poverty, as the training activity was structured in PY 1986.
- OJT with placement is the most effective overall strategy for improving the post-program employment and earnings of White and Black school dropouts between the ages of 22 and 35. This suggests that even if some women appear at enrollment to "need" B/R Ed because they are dropouts, they may benefit economically more from OJT over the longer term.

- B/R Ed, without subsequent skills-training, is unlikely to move AFDC/JTPA participants into 4-quarter employment. However, it can raise above poverty several important subgroups of women who become employed all four quarters of a year, such as older (age 36 or more) school dropouts and Blacks.
- Older women (age 36 or more), who became employed all four quarters of a post-program year after being placed from an intensive training activity, seem to need at least one year of post-program work experience before their earnings are above the poverty threshold.

Certainly these general patterns on "what works best for whom" are not hard and fast targeting rules. In the final analysis, local conditions and individual circumstances govern which training activities are appropriate for AFDC/JTPA participants in individual Service Delivery Areas. Nevertheless, the patterns offer guidelines on what has been broadly effective and where general programmatic improvements would need to occur for JTPA training to be successful in a "two years and out" welfare program.

Endnotes

1. Chapter 2 provides more detail on JTPA's performance standards system.
2. The characteristics in the "job readiness index" are: recent work experience; educational attainment; receipt of AFDC or General Assistance; race/ethnicity; and for women only, being a single parent. General Accounting Office, *Job Training Partnership Act: Services and Outcomes for Participants with Differing Needs*, HRD-89-52, Washington, D.C., June 1989.
3. In the context of this report, age is an indicator of the amount of time these women may have been on AFDC, rather than working. Because there was no obvious age cut-off, sample size dictated the particular grouping. At issue is the extent to which placement from the different intensive training activities — compared to placement from JSA/SS — overcame the likely greater "work experience deficit" found among older than younger women.

Age, rather than labor force status at enrollment, was selected since it is often used as an indicator of work experience (or in this case, lack of work experience) in empirical research in labor economics.
4. Within the two age groups, the AFDC/JTPA participants were further divided on the basis of their education. The issue being examined here paralleled that for age: the extent to which placement from the different intensive training activities — compared to placement from JSA/SS — overcame the greater "educational deficit" found among school dropouts than high school graduates. Women with education beyond high school were omitted in order to focus on those AFDC/JTPA participants who would be considered the "hardest to serve."
5. The purpose was to examine the possibility that the effectiveness of different training strategies might differ across race/ethnic groups.
6. Appendix D contains the results of the logit models on post-program employment; Appendix E contains the results of the logit models on the post-program likelihood of being above the poverty threshold. For each table of results from the logit models there is a companion table showing the changes in the probability of the outcome occurring, relative to placement from JSA/SS, that were associated with the independent training/placement variables.
7. Although not shown in Table 8, the relationship between **non-placement** from JTPA and the various post-program outcomes was also examined. As in the previous chapter's analyses, findings for the subgroups revealed negative relationships between (a) non-placement and post-program employment, and (b) non-placement and the likelihood of rising above poverty among those who were employed. The results are in the relevant tables in Appendices D and E; they are not included here for ease of exposition.

It was previously noted that there were sizeable increases in the number of women, not placed by JTPA, who were employed in all four quarters of the second post-program year. Analyses of the subgroups suggest that while these increases occurred among all

age, education, race and ethnic groups, they were greater among the younger women. Women between 22 and 35 seemed to be more likely — on their own — to overcome the barriers that prevented them from both being placed and being employed in all four quarters during the first post-program year.

8. It should be noted that for Hispanics, the coefficient for OCT in the "poverty threshold" model for the second post-program year just missed being significant at the 10 percent level. It is possible that this variable would be significant if the sample size were larger.
9. It should be recalled that B/R Ed includes English-as-a second language programs.

■ CHAPTER SEVEN: Summary and Conclusion

This report has examined the effectiveness of JTPA Title II-A training programs in moving adult women who were AFDC recipients "into the workplace" and "out of poverty" during Program Year 1986. The focus has been on women who had not worked at least one year prior to enrollment in JTPA programs, since they could well be in a target group for current proposals to limit the amount of time individuals may receive welfare. They would be prime candidates for a dramatically new welfare program that has become popularly known by the phrase, "two years and out."

The adult female AFDC/JTPA participants, without employment in the year prior to JTPA enrollment, comprised about half of all adult female AFDC/JTPA participants in the eleven states included in this analysis.¹ Nationwide, JTPA has served about 120,000 female AFDC recipients per year (adults and youth), about one third of all female participants.

It could reasonably be said that the adult AFDC/JTPA participants studied here were "hard to place," due to their characteristic, "lack of recent work experience." However, since participation in JTPA was voluntary for most AFDC recipients, most of them may have been less "hard to place" than AFDC recipients generally due to another characteristic — their interest in (re-)entering the workforce. At the time of their enrollment in JTPA training, three quarters of the these AFDC/JTPA participants reported they were "looking for work." In contrast, data on all AFDC recipients (from the states being examined who had been without employment in the prior year) indicated that fewer than 20 percent were looking for work during the same time period.

AFDC/JTPA Participants' Post Program Employment

JTPA programs appear to have been successful in terms of employment outcomes for these AFDC/JTPA participants. Three quarters were placed in jobs covered by Unemployment Insurance.² Half of the "placed" AFDC/JTPA participants were employed all four quarters in their first post-program year and just under half were employed each quarter of their second post-program year.

Of course, the PY 1986 percentages of AFDC/JTPA participants who were employed all four quarters of a post-program year would not be sufficient for a new "two years and out" program for AFDC recipients. JTPA training providers would need to place greater emphasis on finding permanent jobs for these women (and jobs with adequate earnings, as discussed next). At the same time, it is worth noting that the employment rate of the AFDC/JTPA participants examined here was in line with

that of a roughly defined comparison group — non-college women. During the period covered in this report, approximately 30 percent of these women were employed full-time and full-year.

Two reasons may be suggested for the relatively high employment rate of the AFDC/JTPA participants who had not worked in the year prior to enrollment. One relates to their own motivation to (re-)enter the workforce, as mentioned earlier.

A second reason may be that JTPA has an established set of national performance (or outcome) goals. Local areas that exceed particular numerical goals (or standards) are rewarded for their success, i.e., they can receive an "incentive bonus."

The outcomes reported here occurred during a year when "percent employed at program termination" was the specific performance goal for adult AFDC recipients. (There has been no separate performance goal for youth AFDC recipients even though they may be heading their own household, and receiving AFDC payments.)

Subsequently, this short-term goal was replaced by a longer-term employment goal: "percent employed during the 13th week after program termination." A useful direction for further examinations of JTPA would be to ascertain if the system responded to this new goal with increases in the percentage of women who were employed in each quarter of a post-program year. To the extent that it did, this would be indicative of the system's ability to respond to the **employment** goals of a "two years and out" program.

Training Activity and Placement

Both the type of training received — and placement from that activity — were key to positive employment outcomes for the AFDC/JTPA participants in general.

- Those placed from two particular "intensive activities" — occupational classroom training and on-the-job training — had a significantly greater likelihood of being employed all four quarters in both the first and the second post-program years than their counterparts placed from a "less intensive activity," job search assistance/support services.
- In contrast, placement into jobs from the "intensive activity" of basic/remedial education was not associated with a higher likelihood of employment all four quarters of either the first or the second post-program year.

However, these overall employment effects were not systematic across AFDC/JTPA participants of different ages, educational levels, and race/ethnicity. Separate analyses for subgroups of these women revealed that on-the-job training had the greatest relative employment impact on younger Black and White school dropouts (i.e., between the ages of 22 and 35). They were the only subgroups more likely to be employed in each and every quarter of **both** post-program years than their counterparts placed directly from job search assistance/support services.

Placement from occupational classroom training had a similar effect on the younger Black high school graduates. That is, they were the only subgroup more likely to be "4-quarter" employed in both post-program years than their counterparts placed from job search assistance/support services.

Compared to placement from job search assistance/support services, placement from basic/remedial education had an employment impact only for Hispanics and then only for the second post-program year.³ Thus, although AFDC/JTPA participants may appear to "need" basic/remedial education at enrollment, unless this activity is followed by job training, it is unlikely to move AFDC/JTPA participants into "stable" employment.

AFDC/JTPA Participants' Post-Program Self-Sufficiency

Economic self-sufficiency for AFDC/JTPA participants can be defined in a number of ways. In this report three measures were used: (a) earnings greater than the Maximum AFDC Benefits for a 3-person family in the AFDC/JTPA participant's state; (b) earnings sufficiently high that women in a 3-person family were no longer eligible for AFDC payments in their state (the Gross Income Limit); and (c) earnings that raised the AFDC/JTPA participants above the 1990 Census poverty threshold for a 3-person family (\$9,885 per year).⁴

The national poverty threshold was the primary measure of self-sufficiency used in this report in order to have a national JTPA performance goal for earnings analogous to that for employment. Although there was no such "earnings performance goal" for AFDC/JTPA participants during the period under examination, one has subsequently been instituted.⁵ JTPA's earnings performance goal would be especially important if JTPA training providers were to be part of a "two years and out" program.

A national measure, rather than a state-based measure (such as the Maximum Benefit Level or Gross Income Limit) was selected for emphasis for another reason as well: it is a less erratic target than the state-based figures. Specifically, states can, and do, change their measures from one year to the next by amounts that are not readily predictable. Use of a state-based measure as a performance target could cause practical problems for training providers: they could place AFDC/JTPA participants in jobs paying more than their state's Gross Income Limit at the time the participants left training, only to find these participants earning less than a new (and substantially higher) Gross Income Limit the following year.

A payoff to placement in a job from the JTPA system (regardless of training activity) was found in the percentages of AFDC/JTPA participants who were above the 1990 poverty threshold:

- 16 percent were above poverty in their first post-program year; and
- 22 percent were above poverty in their second post-program year.

In contrast, among those who had not been placed in a job:

- 2 percent were above poverty in the first year; and
- 8 percent were above poverty in the second year.

A payoff to both placement and employment in all four quarters was found in the percentages of women who were above the various measures of self-sufficiency. Among the AFDC/JTPA participants who were placed and subsequently employed all four quarters during the first post-program year:

- Over 90 percent earned more than their state's Maximum Benefit Level. The high rate of "self-sufficiency" based on this measure is not surprising since the Maximum Benefit Levels were quite low, ranging from \$2,388 to \$5,904 per year for a 3-person family in the states included in this analysis.
- Just under 40 percent were above their state's Gross Income Limit in their first post-program year. The smaller percentage of women "self-sufficient" based on this measure is due to the considerably higher level of earnings that a woman must have received to no longer qualify for AFDC. (The range was \$6,328 to \$17,760 per year for a 3-person family in the states in this analysis.)
- Thirty one percent were above the 3-person family national poverty threshold.

By the second post-program year, there was a sizeable increase in the percentage of "placed and employed" women who were above their state's Gross Income Limit: 71 percent had become self-sufficient based on this measure. There was also an increase in the percent of "placed and employed" women who were above the national poverty threshold: to 44 percent. These increases were due to higher hourly wages (pay raises), greater amounts of time worked, or both.

These figures suggest two points. First, the finding that AFDC/JTPA participants' earnings increased over time has important implications for a "two years and out" program of welfare reform. In particular, the earnings women receive after being placed from JTPA training are not necessarily the highest they will ever receive. Although women employed in all four quarters of their first post-program year may be below a national poverty threshold, they may also "earn their way" above it during the following year. The "two" in a "two years and out" program could refer to the number of years following training, rather than the number preceding, or including training.

Second, a "two years and out" program would place much heavier demands on the JTPA system in terms of the earnings of the jobs for which the participants would qualify after training. The system would need to provide much higher quality training, and place considerably more emphasis on "quality" placements, than it had done in PY 1986. This would be especially important for women without recent work experience: the training would have to compensate for their lack of experience.

To some extent the JTPA system may already be providing "higher quality" training and placements. During the period under examination, "Cost per Entered

Employment" was a performance goal for all adult JTPA participants; its purpose was to set a cap on JTPA expenditures per adult trainee. Since Program Year 1990, this performance goal has been dropped. In addition, a performance goal of "average earnings for those employed" has been established. It would be important to learn how the system changed — especially in terms of the quality of training provided — after training costs per trainee were excluded from, and earnings goals were added to, JTPA's performance management system for adult programs.

Training Activity and Placement

General results on AFDC/JTPA participants without employment in the year prior to enrollment, suggested that all three "intensive" training activities increased the likelihood that those who were "4-quarter" employed would be above poverty, compared to those placed from job search assistance/support services.

However once again, separate analyses of different age, education, and race/ethnic groups revealed that placement from these activities affected the groups in different ways. For example, compared to placement from job search assistance/support services:

- Placement from both occupational classroom training and on-the-job training increased the likelihood that younger (age 22 to 35) White high school graduates, employed in all four quarters, would be above poverty in **both** post-program years;
- Placement from both occupational classroom training and on-the-job training increased the likelihood that younger Black high school graduates would be employed all four quarters in both post-program years; but among those so employed, it had no relative effect on the likelihood that they would be above poverty;
- Placement from on-the-job training raised the likelihood that younger Black school dropouts, employed in all four quarters, would be above poverty in **both** post-program years; it raised the likelihood that younger White school graduates, employed all four quarters, would be above poverty in the first post-program year;
- Placement from basic/remedial education raised the likelihood that younger Black high school graduates and White school dropouts, employed all four quarters, would be above poverty in the first post-program year; and
- Placement from the three intensive activities raised the likelihood that various subgroups of older AFDC/JTPA participants (age 36 or older) would be above poverty by the second post-program year if they were employed all four quarters.

In sum, higher quality training — in combination with a more careful match between training strategies and participants' characteristics — would be critical to the JTPA system's successful participation in a "two years and out" welfare program.

A Role for JTPA in a "Two Years and Out" Program

Overall, it could be said that JTPA programs have made a substantial impact in the lives of many AFDC recipients who had not worked the year prior to enrollment. At the same time, the JTPA system would need to accomplish a great deal more under a "two years and out" program: of the AFDC recipients already being served all would need to be moved not only into permanent employment, but also into jobs with earnings sufficiently high that they no longer qualify for AFDC.

While JTPA Title II-A training programs — separately or in combination with JOBS programs funded under the Family Support Act of 1988 — could play a useful role in current efforts to move AFDC recipients "off welfare," a "two years and out" program would place new and unprecedented demands on the system. Historically the system has responded to new challenges, although it has needed time to adjust.

To some extent the required changes may already have been set in motion when the "Cost per Entered Employment" performance goal was dropped from the performance management system for adult programs in PY 1990 and the "average earnings" goal was included. Additional changes are likely to be occurring due to the 1992 Job Training Reform Amendments. The Amendments shifted the JTPA system in several ways consistent with the requirements of a "two years and out" program.

First, more emphasis is to be placed on assessment and case-management than in the past. Second, a higher percentage of funds can now be allocated to support services (for example, transportation and child-care). These two provisions should act to reduce the percentage of participants (AFDC recipients and others) who leave the training prior to placement for reasons where training providers could have made a difference.

Finally, training providers are now to emphasize intensive training — such as occupational classroom, meaningful on-the-job training, and basic/remedial education combined with skills training. These are the types of activities most likely to lead to positive employment outcomes and "high" earnings for AFDC/JTPA (and other) participants.

Although the issue was not explicitly addressed in the Amendments, it must be noted that training providers will need to give equal attention to job development. Placing AFDC/JTPA participants in jobs is as important as training them.

At the time this report is being written, it is too early to judge the effects of the 1992 Amendments. However, a study of how the system is changing should be conducted if JTPA's potential role in a "two years and out" program is to be clearly understood.

A few cautionary notes are also in order. If the training programs are as successful — in terms of enhancing AFDC recipients' employment prospects and increasing their earnings — as they would need to be under a "two years and out" program, their very success could have an unintended consequence. Women with few skills, not previously on AFDC, would have an incentive to become AFDC recipients (even

if for only a short period). This action would enable them to obtain training that would improve their economic well-being and for which they would otherwise not qualify.

In addition, the findings in this report were based on a JTPA system with particular characteristics. One is that participation was voluntary for most AFDC recipients. Success of a training component in a "two years and out" program will be greater to the extent AFDC recipients are themselves motivated, rather than required, to enroll. Of course, the women's awareness that welfare benefits would end after two years could itself be a powerful force, motivating them to participate in training.

Third, about one-third of all female JTPA participants have been welfare recipients; the JTPA system has served about 120,000 female AFDC recipients (adults and youth) annually. It is reasonable to believe that positive outcomes for both AFDC recipients and others would be obtained if modest increases in the number of AFDC women in JTPA were phased in over time and in a systematic manner.

It seems less reasonable to believe that similar, or better, results would be obtained if there were massive and abrupt increases. When "new rules of the game" are instituted for JTPA, JOBS, or any other program, the affected administrative structures, institutions, and people need time to adjust. The new goal of "two years and out" for welfare recipients is an important one. Assuring that there is an appropriate system in place to achieve the goal is equally important, lest the shortcomings of the system be misinterpreted as the shortcomings of the goal. "This is a tale to give incrementalism a good name."⁶

Endnotes

1. JTPA programs define an adult as a person 22 years of age or older; youth are 16 through 21 years of age.
2. Nationwide, over 90 percent of all employed workers are in jobs covered by UI. Another 4 percent of the AFDC/JTPA participants were placed in other education and training programs; just over 20 percent left the training prior to placement for reasons where training providers might have been able to provide assistance, e.g., transportation or family problems.
3. Basic/remedial education includes English-as-a-second language programs.
4. This is equivalent to a woman working 50 weeks per year, 35 hours per week at \$5.65 per hour.
5. In PY 1990 a performance goal of "average earnings in the 13th week after program termination among those employed" was established. The standard for welfare recipients was \$182 per week, which equals \$9,100 per year for persons employed 50 weeks.
6. Besharov and Fowler, p. 108.

■ APPENDIX A: Research Findings from Welfare Demonstration Projects

As noted in Chapter 1, most of the past research on the effectiveness of training programs for AFDC recipients has consisted of welfare demonstration projects, commonly termed "welfare demos." In addition there has been the National JTPA Experiment. These welfare demos (as well as the National JTPA Experiment) have been experiments: individuals were **randomly assigned** at program intake either to a group that was to receive the services (the "treatment group") or to a group that was not to receive the services (the "control group"). The goal was to create two groups who were as similar as possible except that one received the "treatment" while the other did not.

The major advantage of this experimental approach is that it is possible to assess the effectiveness of the training programs independent of the characteristics of the individuals who participate in them. This is a key issue in program evaluations since a training program may be effective because of the type of people who enroll in it, rather than because of the training itself. For example, data may show that only well educated individuals enroll in the training and it is the level of their prior education, rather than the training, that is associated with positive post-program outcomes.

Random assignment experiments overcome this problem of measuring program impacts, formally termed a "selectivity bias" problem. Without random assignment there may be selectivity bias associated with characteristics of individuals that evaluators can observe. There may also be selectivity bias associated with characteristics that evaluators cannot observe. One example is a person's motivation to work. It may be that highly motivated people enroll in the training and it is their motivation, rather than the training, that leads to positive post-program outcomes.

A "random assignment" process eliminates problems associated with selectivity bias. The experiences of the control group can be used to estimate what would have happened to the treatment group had the treatment group members not received the program's services. If the treatment group does significantly better than the control group in terms of such indicators as post-program employment and earnings, then it is possible to report that the program itself has had a positive "net impact" on its participants.¹

For the most part, the welfare demonstrations have focused on net impacts in terms of increases in employment and earnings, and decreases in welfare receipt and size of payments.² Also for the most part, results indicate that there have been positive post-program outcomes for treatment group members. However, there have been variations across the demonstrations.

For example, even though the San Diego project, "Saturation Work Initiative Model" (SWIM), and the Baltimore Options Project had similar target groups, major program activities, and average costs, they had somewhat different results. The San Diego SWIM project showed increased employment and earnings and decreased welfare receipt and payments. In comparison, while the Baltimore Options Project also showed an increase in both employment and earnings, there was no impact on welfare receipt or payments.³

Moreover, 18-month post-program results from the JTPA Experiment showed that women receiving welfare at the time of enrollment did not experience a significant increase in their post-program earnings compared to their counterparts in the control group. Results 30 months after enrollment showed no significant reduction in the amount of AFDC benefits received by the treatment group women on AFDC compared to the control group of women on AFDC.⁴

These differences in outcomes are especially important since the goal of a new AFDC program is to reduce welfare dependency within some period of time, such as two years. Currently, the practical issue facing policymakers is the extent to which results from the demonstrations can be used to develop a national policy. Unfortunately, the experiments (including the JTPA Experiment) have several limitations when the question being addressed is "how to raise women's earnings so that they no longer qualify for AFDC after some limited period of time?"

This review of the literature on the welfare demos is organized around three issues. They are the extent to which the results: (a) can be generalized to sites throughout the nation; (b) include findings on the effectiveness of particular training strategies (such as on-the-job training versus occupational classroom); and (c) differentiate between receipt of training and receipt of no training.⁵

Generalizing Results

One limitation of the welfare demos is that very few results can be generalized. As of 1991 (when the major survey of the results of the welfare demos was published), there were 13 demonstration projects that had information on post-program outcomes. These projects ranged in size from 70 sites in seven states (the AFDC Homemaker-Home Health Aide Demonstrations) to one local office (Louisville WIN Laboratory Experiments).⁶

A problem arises because the sites of these demos are not statistically representative of all sites nationwide. It is not possible to conclude that the training approaches used at the various demonstration sites would produce similar results if they were adopted nationally.⁷

Moreover, the demonstrations had little in common. Rather, each had its own particular set of characteristics (such as target group and activities permitted).

Each program essentially represents a unique bundle of program characteristics and hence each effectively constitutes a sample size of one, with consequent deleterious implications for the level of uncertainty about the true effects of each.⁸

Even within a demonstration, the sites often differed in their implementation of the training program to such an extent that the evaluators were cautious in generalizing their results.⁹

From the 13 demonstrations with post-program outcomes reported by 1991, two general results did emerge. One is that training efforts can increase the women's earnings. The list below gives some of the largest differences in average annual earnings between treatment and control group members in the second post-program year for these 13 welfare demos. (A "+" sign indicates that the treatment group earned more than the control group).

- + \$658 — San Diego SWIM Project
- + \$401 — Baltimore Options project
- + \$591 — New Jersey On-the-Job Training Program
- + \$871 — Maine On-the-Job Training Program.¹⁰

A second general result appears to be that training efforts can reduce welfare payments. Below is a list of the average annual reduction in AFDC payments between the treatment and control group members in the second post-program year for the same welfare demos just listed. (A "-" sign indicates that reductions in AFDC payments were greater within the treatment group; a "+" sign indicates they were greater within the control group.)

- \$553 — San Diego SWIM Project
- \$ 34 — Baltimore Options project
- \$238 — New Jersey On-the-Job Training Program
- + \$ 29 — Maine On-the-Job Training Program.¹¹

However, the welfare demos have left unresolved two key questions. Does training move AFDC recipients off welfare entirely? And, does training raise them above poverty?¹²

Estimating Effects of Training Strategies

A further limitation of the welfare demos is that most of the analysis focused on the overall average effects of the programs. The effects of particular types of training on post-program outcomes have not been thoroughly analyzed (for example, basic/remedial education versus occupational classroom training).¹³ Yet understanding the effectiveness of different types of training is critical to developing policies that would move AFDC recipients into positions of economic self-sufficiency.¹⁴

This limitation is due to the point at which random assignment occurred: AFDC recipients were put into the treatment or control group at intake. Those who were in the treatment group were subsequently given a training assignment. Thus,

within the treatment group there may be selectivity bias in the types of women who participated in the different activities. For the experiments to have produced results on the effects of the various types of training, random assignment would have had to occur at several points. Intake would be the first point, and a second stage of randomization would have had to occur after assignment to a training program.¹⁵

The results of one particular training strategy have been publicized within the employment and training community. The strategy was to integrate basic skills training with occupational training in an open entry/open exit program rather than to provide the two types of training sequentially. Findings showed that the treatment group (at the San Jose site of the Minority Female Single Parent Demonstration or MFSPD) had significantly higher employment and earnings than their counterpart control group.¹⁶

However, the usefulness of these results should not be overstated since it is likely that there was selectivity bias in the follow-up sample on which the findings are based.

Most troubling is the fact that, while there were essentially no respondent-nonrespondent differences among control group members in terms of pre-baseline work experience and earnings, respondents within the treatment group had worked about 50 percent more weeks on average than non-respondents (14 weeks vs 9) and had earned over twice as much (\$2,081 vs. \$1,023).¹⁷

Thus, the positive results of the "treatment" could be due to the stronger prior labor market experience of respondents in the follow-up sample of treatment group members, compared to those in the follow-up sample of control group members.

Estimating Training Versus No Training

Finally, the experiments have not produced results on the effects of "training versus no training." There are two reasons for this limitation.

First, some control group members obtained assistance through other programs. For example, in the MFSPD demonstration one-third of the control group participated in some type of training other than that offered within the experiment.¹⁸ This means that findings on the effects of the demonstration are smaller than would be expected if the control group members had received no assistance. It is not possible to estimate what would have occurred in reductions in welfare dependency between the treatment and control groups if the control group had received no outside assistance.

The second reason the effects of "training versus no training" have not been estimated is that some treatment group members dropped out of the training program prior to completion. For example, dropout rates in the GAIN demonstration sites ranged from 37 percent to almost 60 percent.¹⁹ Thus, the relatively small size of the estimated program effects is also likely to be due to the

inclusion of "dropouts" in the treatment group.²⁰ While it is possible to adjust for this bias, the necessary statistical procedures do not appear to have been implemented.²¹

In sum, while evidence from the welfare demos suggests that training programs can improve the employment and earnings of welfare recipients, it is not clear "by how much." Also, the evidence provides little insight into the "how and the why" questions involved in establishing a national program.

Endnotes

1. The term "significant" is used in the statistical sense.
2. See Gueron and Pauly, (1991), Table 3.1, pp.85-91; Table 3.2, pp. 101-104; Table 3.3, p.108; Table 3.4, pp. 111-113; and Table 3.5, pp. 115-119.
3. See Gueron and Pauly, (1991), Table 3.1, pp. 85-92 and Table 4.2, pp.144.
4. Abt Associates, (January 1993), Exhibit 4.15, p. 116; and Abt Associates, (January 1994), p. 22.
5. The organization of the subsequent discussion in this appendix draws heavily on an assessment of the National JTPA Experiment, which had a structure similar to that of the welfare demos and also had similar limitations in terms of the results it produced. The assessment is found in Bowman, (June 1993), Chapter II and Appendix A. A more detailed discussion of the limitations of experiments is found in Heckman, (1992).
6. Gueron and Pauly, (1991), Table 3.1, pp. 85-92; and Table 3.2, pp.101-104.
7. See Moffit, (March 1992), p. 49; and David Greenberg and Michael Wiseman, *What Did the Work-Welfare Demonstrations Do?*, DP #969-92, Madison, Wisconsin: Institute for Research on Poverty, University of Wisconsin-Madison, (April 1992), p. 139. "Project Independence" in Florida did randomly select 9 counties from the 25 counties with the largest AFDC caseloads in the state. James J. Kemple and Joshua Haimson, *Florida's Project Independence: Program Implementation, Participation Patterns, and First Year Impacts*, New York, New York: Manpower Demonstration Research Corporation, (January 1994), p. xix.
8. Moffit, (March 1992), p. 45.
9. For example, see Gueron and Pauly, (1991), p. 23; and Friedlander et al, (May 1993), pp. 26-27.
10. Gueron and Pauly, (1991), Table 1.1, pp. 15-20. These differences were statistically significant at the 10 percent level or higher.
11. Gueron and Pauly, (1991), Table 1.1, pp. 15-20. The differences for the SWIM Project and the New Jersey On-the-Job Training Program were statistically significant at the 10 percent level or higher.
12. See Gueron and Pauly, (1991), Chapter I; and O'Neill, (1990), Chapter 5.
13. The National JTPA Experiment did provide some findings regarding the different types of training activities, although not for women on AFDC. For example, see Abt Associates, (January 1993), Exhibit 4.12, p. 106.
14. Evaluators have termed this particular limitation as the "black box": it is possible to state whether or not a program works, but not the how or the why. See James Heckman, "Basic Knowledge — Not Black Box Evaluations," *Focus*, Volume 14, Number 1 (1992), pp. 24-25.

15. See Gueron and Pauly, (1991), p. 70; and Bowman, (1993), pp. 9-11.
16. Robinson G. Hollister, Jr. *The Minority Female Single Parent Demonstration: New Evidence about Effective Training Strategies*, New York: The Rockefeller Foundation, (1990).
17. Gordon and Burghardt, (March 1990), p. 117. Also, Friedlander et al note that their interim report on GAIN (after 2 years) may contain biases if there are systematic differences in the baseline characteristics of participants who enrolled early and thus could be included in the analysis and those who enrolled later and thus could not be included. Friedlander et al, (May 1993), p. 15.
18. Gordon and Burghardt, (March 1990) p. 28-29. See also Gueron and Pauly, (1991), p. 69; and Kemple and Haimson, (January 1994), p. 20.
19. Friedlander et al, (May 1993), Table 1.3, p. 21. See also Gueron and Pauly, (1991), p. 11.
20. Greenberg and Wiseman, (April 1992), p. 139.
21. These procedures are described in Howard Bloom, "Accounting for No-shows in Experimental Evaluation Designs," *Evaluation Review*, Number 8, (April 1984), pp. 225-246.

■ APPENDIX B: Definitions of Variables Used in Multivariate Models

(* = used in models for Hispanic women)

DROPOUT	participant with less than a high school diploma (yes = 1; no = 0)
MOREGRAD	participant with more education than a high school diploma (yes = 1; no = 0)
	REFERENCE GROUP IS PARTICIPANT WITH A HIGH SCHOOL DIPLOMA
HDOFHSE	participant reported she was head of a household at the time of enrollment (yes = 1; no = 0)
LIMENGL	participant with limited proficiency in English (yes = 1; no = 0)
EMPENR	participant reported she was employed at the time of enrollment (yes = 1; no = 0)
UNENR	participant reported she was unemployed at the time of enrollment (yes = 1; no = 0)
EMPUNENR*	participant reported she was either employed or unemployed at time of enrollment (yes = 1; no = 0)
	REFERENCE GROUP IS PARTICIPANT WHO REPORTED SHE WAS OUT OF THE LABOR FORCE AT TIME OF ENROLLMENT
AGE2235*	participant who was between 22 and 35 years of age (yes = 1; no = 0)
AGE3135	participant was between 31 and 35 years of age (yes = 1; no = 0)
AGE3134	participant was between 31 and 34 years of age (yes = 1; no = 0)
AGE3640	participant was between 36 and 40 years of age (yes = 1; no = 0)

AGEGT40	participant was over 40 years of age (yes = 1; no = 0)
	REFERENCE GROUP IS PARTICIPANT WHO WAS BETWEEN 22 AND 30 YEARS OF AGE
BLACK	participant was Black (yes = 1; no = 0)
HISP	participant was Hispanic (yes = 1; no = 0)
OTHER	participant was a member of another race/ethnic group, e.g., Asian or Native American (yes = 1; no = 0)
	REFERENCE GROUP IS PARTICIPANT WHO WAS WHITE
TRMQTRN2*	participant left JTPA in the first, third, or fourth quarter (yes = 1; no = 0)
TRMQTR1	participant left JTPA during the first calendar quarter (yes = 1; no = 0)
TRMQTR3	participant left JTPA during the third calendar quarter (yes = 1; no = 0)
TRMQTR4	participant left JTPA during the fourth calendar quarter (yes = 1; no = 0)
	REFERENCE GROUP IS PARTICIPANT WHO LEFT JTPA DURING THE SECOND CALENDAR QUARTER
UEMPLT7	local area's unemployment rate was less than 7 percent (yes = 1; no = 0)
AWAGLT5K	average earnings of local area was less than \$5,000 per year (yes = 1; no = 0)
STATE A-I	variables representing participants' state of residence; one "state effect" is that of three small states combined
STATES 1-2	states grouped according to percentage of the AFDC/JTPA participants included in the analysis
STATE H*	all states with Hispanics except one (yes = 1; no = 0)
	REFERENCE GROUP IS ONE STATE
OCTPLAC	participant was placed from occupational classroom training (yes = 1; no = 0)
BREPLAC	participant was placed from basic/remedial education (yes = 1; no = 0)

OJTPLAC participant was placed from on-the-job training
(yes = 1; no = 0)

OCTNPLC participant left occupational classroom training prior to placement
(yes = 1; no = 0)

BRENPLC participant left basic/remedial education prior to placement
(yes = 1; no = 0)

OJTNPLC participant left on-the-job training prior to placement
(yes = 1; no = 0)

JSA/SSNPLC participant left job search assistance and/or support services prior
to placement (yes = 1; no = 0)

NOTPLAC participant left JTPA training (regardless of activity) prior to
placement (yes = 1; no = 0)

REFERENCE GROUP IS PARTICIPANT PLACED FROM JOB
SEARCH ASSISTANCE AND/OR SUPPORT SERVICES

■ APPENDIX C: Results of Logit Models in Chapter 5

Table C-1

Multinomial Logit Model of the Likelihood of
AFDC/JTPA Participants' Placement or Non-Placement
From Training Activities
(PY 1986 Terminees)

Variable	OCTPLAC	BREPLAC	OJTPLAC	NOTPLAC
INTERCEPT	-3.341*** (0.268)	-3.151*** (0.277)	+.984** (0.420)	-1.314*** (0.294)
DROPOUT	+.077 (0.111)	+.606*** (0.118)	-.298* (0.165)	+.181 (0.122)
MOREGRAD	-.005 (0.148)	+.001 (0.153)	+.093 (0.252)	-.113 (0.162)
HIGHHSCE	+.203 (0.168)	+.245 (0.175)	+.311 (0.240)	+.207 (0.181)
LIMENGL	-.698 (0.779)	+.247 (0.834)	-2.525*** (0.870)	-1.493* (0.795)
EMPENR	-.597 (0.395)	-.601 (0.405)	-1.170** (0.497)	-1.194*** (0.407)
UNENR	-.017 (0.154)	-.292* (0.158)	-.243 (0.234)	-.146 (0.168)
AGE3135	+.055 (0.125)	-.039 (0.131)	+.274 (0.193)	+.120 (0.139)
AGE3640	-.036 (0.166)	+.092 (0.175)	+.051* (0.273)	-.124 (0.179)
AGEGT40	+.165 (0.190)	+.252 (0.201)	+.692** (0.317)	+.126 (0.207)
BLACK	+.095 (0.118)	+.450*** (0.124)	+.478*** (0.176)	+.475*** (0.130)
HISP	-.054 (0.338)	+.121 (0.348)	-.570 (0.473)	-.042 (0.364)
OTHER	-.276 (0.524)	-.429 (0.547)	+.981 (0.837)	-.239 (0.552)

Table C-1 (continued)

Variable	OCTPLAC	BREPLAC	OJTPLAC	NOTPLAC
TRMQTR1	+0.277* (0.143)	+0.088 (0.150)	-0.167 (0.209)	+0.654*** (0.163)
TRMQTR3	+0.347** (0.142)	+0.249* (0.149)	+0.322 (0.223)	+0.278* (0.154)
TRMQTR4	+0.581*** (0.131)	+0.478*** (0.139)	+0.098 (0.197)	+0.183 (0.142)
UEMPLT7	+0.363*** (0.108)	+0.204* (0.114)	-0.047 (0.163)	+0.411*** (0.119)
AWAGLT5K	+0.644*** (0.132)	+0.407*** (0.138)	-0.114 (0.213)	-0.375** (0.150)
STATE A	-0.913*** (0.249)	-1.115*** (0.253)	-0.768* (0.409)	-1.454*** (0.262)
STATE B	-3.258*** (0.727)	-3.191*** (0.729)	-4.634*** (0.776)	-3.604*** (0.735)
STATE C	+0.849 (0.191)	-0.224 (0.191)	-0.723** (0.312)	-0.300 (0.204)
STATE D	+0.387 (0.340)	+1.157*** (0.376)	-0.146 (0.584)	-0.246 (0.354)
STATE E	+0.855*** (0.174)	+1.234*** (0.190)	-0.392 (0.304)	+0.566*** (0.200)
STATE F	-0.565** (0.278)	-0.228 (0.286)	-0.752* (0.433)	-0.557* (0.297)
STATE G	-0.772*** (0.287)	-1.154*** (0.292)	-1.000** (0.455)	-0.160 (0.327)
STATE H	+1.689*** (0.163)	+2.848*** (0.214)	-0.465* (0.277)	+1.352*** (0.191)
STATE I	-1.346*** (.376)	-0.755** (0.384)	-0.712 (0.583)	-1.367*** (0.391)

Sample Size = 7,987

(S.E.) = Standard Error

- * = significant at the 10 percent level.
- ** = significant at the 5 percent level.
- *** = significant at the 1 percent level.

Table C-2
 Logit Model of the Likelihood That
 AFDC/JTPA Participants Were Employed in all Quarters:
 First and Second Post-Program Years
 (PY 1986 Terminees)

Variable	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	-0.343** (0.147)	-0.502*** (0.143)
DROPOUT	-0.249*** (0.063)	-0.298*** (0.060)
MOREGRAD	+0.178** (0.075)	+0.203*** (0.072)
HDOFHSE	-0.056 (0.086)	-0.036 (0.083)
LIMENGL	+0.284 (0.250)	-0.218 (0.246)
EMPENR	-0.019 (0.166)	+0.120 (0.161)
UNENH	+0.016 (0.076)	-0.011 (0.074)
AGE3135	+0.176*** (0.068)	+0.199*** (0.065)
AGE3640	+0.242*** (0.087)	+0.289*** (0.084)
AGEGT40	+0.147 (0.106)	+0.291*** (0.101)
BLACK	-0.153** (0.065)	+0.004 (0.063)
HISP	-0.170 (0.150)	+0.157 (0.146)
OTHER	+0.136 (0.234)	+0.499** (0.229)

Table C-2 (continued)

Variable	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)
TRMQTR1	+0.053 (0.075)	+0.175** (0.072)
TRMQTR3	+0.101 (0.075)	+0.195*** (0.072)
TRMQTR4	-0.037 (0.073)	+0.200*** (0.070)
UEMPLT7	+0.099* (0.060)	+0.044 (0.057)
AWAGLT5K	+0.086 (0.072)	+0.117* (0.069)
STATE A	-0.096 (0.110)	-0.295*** (0.108)
STATE B	-0.137 (0.126)	-0.118 (0.122)
STATE C	+0.197* (0.104)	+0.134 (0.102)
STATE D	-0.299 (0.202)	-0.242 (0.194)
STATE E	+0.265** (0.117)	+0.141 (0.112)
STATE F	+0.112 (0.124)	-0.174 (0.124)
STATE G	+0.199 (0.127)	+0.150 (0.122)
STATE H	+0.381*** (0.117)	+0.255** (0.114)
STATE I	+0.236** (0.115)	+0.100 (0.112)

Table C-2 (continued)

Variable	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)
OCTPLAC	+0.328*** (0.075)	+0.223*** (0.075)
BREPLAC	-0.251* (0.138)	-0.118 (0.137)
OJTPLAC	+0.357*** (0.084)	+0.232*** (0.084)
OCTNPLC	-1.587*** (0.130)	-0.768*** (0.111)
BRENPLC	-1.800*** (0.243)	-0.644*** (0.179)
OJTNPLC	-1.528*** (0.210)	-0.834*** (0.178)
JSA/SSNPLC	-1.723*** (0.170)	-0.647*** (0.135)
Sample Size	6,467	6,467

(S.E.) = Standard Error

- * = significant at the 10 percent level.
- ** = significant at the 5 percent level.
- *** = significant at the 1 percent level.

Table C-3

Logit Model of the Likelihood That Employed
AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

Variable	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	-0.438* (0.240)	+0.060 (0.228)
DROPOUT	-0.708*** (0.116)	-0.634*** (0.102)
MOREGRAD	+0.604*** (0.110)	+0.573*** (0.107)
HDOFHSE	+0.173 (0.143)	-0.008 (0.131)
LIMENGL	-0.536 (0.383)	-0.439 (0.389)
EMPENR	-0.472* (0.281)	-0.717*** (0.260)
UNENR	-0.214* (0.122)	-0.123 (0.115)
AGE3135	-0.098 (0.112)	+0.154 (0.103)
AGE3640	+0.146 (0.136)	+0.071 (0.130)
AGEGT40	-0.024 (0.177)	+0.214 (0.157)
BLACK	-0.362*** (0.108)	-0.317*** (0.102)
HISP	+0.242 (0.233)	+0.273 (0.227)
OTHER	+0.891*** (0.339)	+0.858*** (0.341)

Table C-3 (continued)

Variable	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)
TRMQTR1	+0.025 (0.123)	+0.075 (0.116)
TRMQTR3	-0.038 (0.122)	-0.010 (0.115)
TRMQTR4	-0.065 (0.121)	-0.040 (0.113)
UEMPLT7	+0.040 (0.099)	+0.087 (0.091)
AWAGLT5K	-0.456*** (0.115)	-0.366*** (0.111)
STATE A	+0.291* (0.175)	+0.089 (0.173)
STATE B	-0.327 (0.220)	-0.424** (0.198)
STATE C	-0.127 (0.163)	-0.388*** (0.154)
STATE D	-0.400 (0.347)	-0.563* (0.315)
STATE E	-0.412** (0.198)	-0.598*** (0.177)
STATE F	-0.507*** (0.192)	-0.211 (0.190)
STATE G	-0.514** (0.225)	-0.827*** (0.206)
STATE H	-0.631*** (0.210)	-0.578*** (0.183)
STATE I	+0.268 (0.169)	+0.365** (0.171)

Table C-3 (continued)

Variable	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)
OCTPLAC	+0.393*** (0.124)	+0.445*** (0.118)
BREPLAC	+0.715*** (0.250)	+0.657*** (0.222)
OJTPLAC	+0.362*** (0.138)	+0.485*** (0.131)
OCTNPLC	-0.534* (0.307)	+0.143 (0.198)
BRENPLC	-0.274 (0.662)	-0.089 (0.355)
OJTNPLC	-1.015 (0.752)	-0.945** (0.437)
JSA/SSNPLC	-1.093** (0.516)	-0.684** (0.293)
Sample Size	2,734	2,770

(a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year.

(S.E.) = Standard Error

- * = significant at the 10 percent level.
- ** = significant at the 5 percent level.
- *** = significant at the 1 percent level.

■ APPENDIX D: Results of Post-Program Employment Models in Chapter 6

Table D-1a

Logit Model of the Likelihood That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years
(PY 1986 Terminees)

White and Black High School Graduates
Between 22 and 35 Years of Age

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	+0.044 (0.347)	-0.230 (0.333)	-0.473 (0.295)	-0.496* (0.287)
HDOFHSE	-0.175 (0.196)	+0.073 (0.187)	-0.208 (0.220)	+0.006 (0.213)
EMPENR	+0.131 (0.332)	+0.295 (0.315)	+0.105 (0.429)	-0.009 (0.409)
UNENR	+0.045 (0.180)	+0.065 (0.170)	-0.003 (0.147)	-0.114 (0.141)
AGE3134	+0.160 (0.144)	-0.135 (0.137)	-0.065 (0.138)	+0.197 (0.132)
TRMQTR1	+0.245 (0.180)	+0.245 (0.170)	-0.058 (0.164)	+0.202 (0.158)
TRMQTR3	+0.042 (0.174)	+0.164 (0.165)	+0.045 (0.165)	+0.107 (0.159)
TRMQTR4	-0.282 (0.177)	+0.004 (0.167)	-0.009 (0.159)	+0.239 (0.153)

Table D-1a (continued)

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
UEMPLT7	+0.453*** (0.137)	+0.180 (0.129)	+0.043 (0.133)	-0.179 (0.127)
AWAGLT5K	-0.049 (0.160)	-0.057 (0.151)	+0.069 (0.140)	+0.185 (0.135)
STATES 1	+0.039 (0.175)	+0.092 (0.171)	+0.523*** (0.177)	+0.166 (0.173)
STATES 2	+0.022 (0.195)	-0.320* (0.190)	+0.083 (0.185)	+0.025 (0.181)
OCTPLAC	+0.111 (0.184)	+0.062 (0.182)	+0.617*** (0.158)	+0.322** (0.156)
BREPLAC	-0.877** (0.368)	-0.058 (0.349)	+0.103 (0.327)	+0.025 (0.327)
OJTPLAC	-0.114 (0.200)	-0.106 (0.199)	+0.487*** (0.194)	+0.139 (0.193)
NOTPLAC	-2.513*** (0.297)	-0.800*** (0.226)	-1.415*** (0.204)	-0.811*** (0.185)
Sample Size	1,152	1,152	1,373	1,373

(S.E.) = Standard Error

- * = significant at the 10 percent level.
 ** = significant at the 5 percent level.
 *** = significant at the 1 percent level.

Table D-1b

Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS on the Probability That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

**White and Black High School Graduates
Between 22 and 35 Years of Age**

Training and Placement	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
Placed from — JSA/SS	(b)	(b)	(b)	(b)
OCT	+.03	+.02	+.15***	+.08**
B/R Ed	-.22**	-.01	+.02	+.01
OJT	-.03	-.03	+.12***	+.03
Not Placed	-.62***	-.20***	-.33***	-.20***
Sample Size	1,152	1,152	1,373	1,373

(a) Based on results from Table D-1a.

(b) Reference group.

* = significant at 10 percent level.

** = significant at 5 percent level.

*** = significant at 1 percent.

Table D-2a

Logit Model of the Likelihood That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years
(PY 1986 Terminees)

White and Black School Droupouts
Between 22 and 35 Years of Age

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	-0.800* (0.433)	-0.829** (0.431)	-0.500 (0.397)	-0.667* (0.386)
HDOFHSE	+0.151 (0.232)	-0.085 (0.226)	-0.303 (0.287)	-0.430 (0.272)
EMPENR	-0.693 (0.524)	+0.283 (0.495)	-0.038 (0.521)	-0.173 (0.516)
UNENR	-0.124 (0.217)	-0.031 (0.214)	+0.161 (0.191)	+0.043 (0.182)
AGE3134	+0.346* (0.198)	+0.286 (0.193)	+0.574*** (0.166)	+0.464*** (0.159)
TRMQTR1	-0.273 (0.236)	-0.213 (0.231)	+0.095 (0.205)	+0.294 (0.198)
TRMQTR3	+0.050 (0.227)	-0.032 (0.222)	-0.070 (0.214)	+0.172 (0.201)
TRMQTR4	-0.416* (0.224)	-0.299 (0.219)	+0.137 (0.204)	+0.570*** (0.194)
UEMPLT7	+0.176 (0.177)	+0.112 (0.173)	+0.002 (0.162)	-0.075 (0.153)
AWAGLT5K	+0.083 (0.237)	+0.290 (0.239)	+0.066 (0.189)	+0.195 (0.178)
STATES 1	+0.188 (0.234)	+0.058 (0.264)	-0.194 (0.255)	+0.038 (0.253)
STATES 2	-0.117 (0.284)	-0.280 (0.285)	-0.270 (0.269)	-0.223 (0.267)

Table D-2a (continued)

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
OCTPLAC	+0.530** (0.259)	+0.356 (0.261)	+0.319 (0.212)	+0.318 (0.212)
BREPLAC	+0.352 (0.328)	-0.202 (0.347)	-0.043 (0.327)	-0.347 (0.345)
OJTPLAC	+1.000*** (0.259)	+0.771*** (0.258)	+0.463* (0.248)	+0.466* (0.247)
NOTPLAC	-1.276*** (0.311)	-0.507* (0.284)	-1.357*** (0.248)	-0.405* (0.217)
Sample Size	711	711	936	936

(S.E.) = Standard Error

- * = significant at the 10 percent level.
- ** = significant at the 5 percent level.
- *** = significant at the 1 percent level.

Table D-3a

Logit Model of the Likelihood That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years
(PY 1986 Terminees)

**High School Graduates and School Dropouts
36 Years of Age or Older**

Variable	Graduates		Dropouts	
	First Post- Program Year	Second Post- Program Year	First Post- Program Year	Second Post- Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	-0.236 (0.449)	-0.244 (0.442)	-0.448 (0.546)	-0.566 (0.536)
HDOFHSE	-0.190 (0.273)	-0.136 (0.269)	-0.125 (0.280)	-0.267 (0.270)
EMPENR	+0.748 (0.550)	+0.851 (0.558)	+0.035 (0.558)	-0.489 (0.581)
UNENR	+0.022 (0.261)	-0.214 (0.255)	+0.452 (0.281)	+0.630** (0.275)
AGEGT40	-0.300 (0.198)	+0.020 (0.194)	+0.144 (0.214)	+0.155 (0.208)
BLACK	-0.102 (0.201)	+0.273 (0.197)	-0.195 (0.222)	+0.363* (0.217)
TRMQTR1	+0.268 (0.251)	+0.115 (0.246)	+0.312 (0.305)	+0.050 (0.299)
TRMQTR3	+0.180 (0.257)	+0.119 (0.252)	+0.136 (0.298)	+0.321 (0.287)
TRMQTR4	-0.081 (0.254)	+0.571** (0.250)	-0.116 (0.283)	+0.203 (0.276)
UEMPLT7	+0.099 (0.206)	+0.369* (0.201)	-0.226 (0.229)	-0.368* (0.223)
AWAGLT5K	+0.025 (0.215)	+0.032 (0.211)	-0.058 (0.271)	+0.186 (0.269)
STATES 1	+0.370 (0.257)	+0.202 (0.257)	+0.491 (0.335)	+0.353 (0.333)
STATES 2	+0.153 (0.293)	+0.089 (0.291)	+0.474 (0.369)	+0.348 (0.367)

Table D-3a (continued)

Variable	Graduates		Dropouts	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
OCTPLAC	+0.245 (0.247)	-0.064 (0.248)	-0.173 (0.295)	-0.486* (0.298)
BREPLAC	-0.741 (0.751)	-0.430 (0.722)	-0.267 (0.483)	+0.167 (0.493)
OJTPLAC	+0.428 (0.272)	+0.390 (0.275)	+0.305 (0.315)	-0.507 (0.316)
NOTPLAC	-1.370*** (0.327)	-0.802*** (0.298)	-2.139*** (0.367)	-1.713*** (0.329)
Sample Size	529	529	448	448

(S.E.) = Standard Error

- * = significant at the 10 percent level.
 ** = significant at the 5 percent level.
 *** = significant at the 1 percent level.
-

Table D-3b

Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS, on the Probability That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

**High School Graduates and School Dropouts
36 Years of Age or Older**

Training and Placement	Graduates		Dropouts	
	First Post- Program Year	Second Post- Program Year	First Post- Program Year	Second Post- Program Year
Placed from — JSA/SS	(b)	(b)	(b)	(b)
OCT	+.06	-.02	-.04	-.12*
B/R Ed	-.18	-.11	-.06	+.04
OJT	+.11	+.10	+.07	-.12
Not Placed	-.34***	-.20***	-.50***	-.41***
Sample Size	529	529	448	448

(a) Based on results from Table D-3a.

(b) Reference group.

* = significant at 10 percent level.

** = significant at 5 percent level.

*** = significant at 1 percent.

Table D-2b

Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS, on the Probability That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

**White and Black School Dropouts
Between 22 and 35 Years of Age**

Training and Placement	White		Black	
	First Post- Program Year	Second Post- Program Year	First Post- Program Year	Second Post- Program Year
Placed from — JSA/SS	(b)	(b)	(b)	(b)
OCT	+.12**	+.08	+.06	+.07
B/R Ed	+.08	-.05	-.01	-.08
OJT	+.23***	+.18***	+.09*	+.10*
Not Placed	-.30***	-.12*	-.27***	-.09*
Sample Size	711	711	936	936

- (a) Based on results from Appendix Table D-2a.
(b) Reference group.

* = significant at 10 percent level.
** = significant at 5 percent level.
*** = significant at 1 percent.

Table D-4a

Logit Model of the Likelihood That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years
(PY 1986 Terminees)

**Whites and Blacks
36 Years of Age or Older**

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	-0.408 (0.453)	-0.608 (0.448)	-1.041** (0.528)	-0.531 (0.496)
HDOFHSE	-0.255 (0.221)	-0.130 (0.216)	+0.601* (0.346)	+0.375 (0.314)
EMPENR	+0.948** (0.462)	+1.081** (0.450)	-0.432 (0.689)	-1.086 (0.695)
UNENR	+0.515** (0.241)	+0.423* (0.236)	-0.102 (0.282)	+0.016 (0.263)
AGEG140	-0.224 (0.178)	-0.214 (0.174)	+0.149 (0.214)	+0.400** (0.204)
DROPOUT	-0.106 (0.195)	-0.441** (0.192)	-0.229 (0.209)	-0.392** (0.200)
TRMQTR1	+0.248 (0.244)	+0.003 (0.239)	+0.343 (0.275)	+0.293 (0.261)
TRMQTR3	+0.150 (0.244)	+0.479** (0.238)	+0.479* (0.281)	+0.184 (0.263)
TRMQTR4	+0.110 (0.232)	+0.482** (0.226)	+0.341 (0.272)	+0.680*** (0.260)
UEMPLT7	+0.161 (0.190)	+0.184 (0.185)	-0.406* (0.227)	-0.191 (0.216)
AWAGLT5K	+0.189 (0.227)	+0.064 (0.222)	-0.000 (0.239)	+0.154 (0.227)
STATES 1	+0.321 (0.246)	+0.242 (0.248)	+0.652** (0.311)	+0.411 (0.303)
STATES 2	+0.410 (0.284)	+0.268 (0.282)	+0.229 (0.351)	+0.208 (0.339)

Table D-4a (continued)

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
OCTPLAC	-0.243 (0.235)	-0.133 (0.235)	+0.450* (0.269)	-0.060 (0.267)
BREPLAC	-0.164 (0.565)	+0.841 (0.594)	-0.285 (0.523)	+0.142 (0.505)
OJTPLAC	+0.141 (0.251)	+0.060 (0.248)	+0.564* (0.312)	+0.098 (0.312)
NOTPLAC	-1.990*** (0.315)	-0.908*** (0.281)	-1.628*** (0.333)	-1.138*** (0.291)
Sample Size	618	618	504	504

(S.E.) = Standard Error

- * = significant at the 10 percent level.
 ** = significant at the 5 percent level.
 *** = significant at the 1 percent level.

Table D-4b

Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS, on the Probability That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

**Whites and Blacks
36 Years of Age or Older**

Training and Placement	White		Black	
	First Post- Program Year	Second Post- Program Year	First Post- Program Year	Second Post- Program Year
Placed from — JSA/SS	(b)	(b)	(b)	(b)
OCT	-.06	-.03	+.11*	-.02
B/R Ed	-.04	+.21	-.07	+.04
OJT	+.04	+.01	+.13*	+.02
Not Placed	-.50***	-.23***	-.38***	-.28***
Sample Size	618	618	504	504

- (a) Based on results from Appendix Table D-4a.
(b) Reference group.

- * = significant at 10 percent level.
** = significant at 5 percent level.
*** = significant at 1 percent.

Table D-5a

Logit Model of the Likelihood That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years
(PY 1986 Terminees)

Hispanics

Variable	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	-0.498 (0.541)	+0.138 (0.535)
HDOFHSE	+0.202 (0.369)	-0.026 (0.366)
EMPUNENR	+0.388 (0.357)	+0.383 (0.353)
AGE2235	+0.173 (0.362)	+0.005 (0.361)
DROPOUT	-0.572* (0.293)	-0.923*** (0.292)
LIMENGL	-0.216 (0.430)	-0.435 (0.427)
TRMQTRN2	-0.420 (0.296)	-0.171 (0.296)
UEMPLT7	+0.088 (0.315)	+0.300 (0.312)
AWAGLT5K	-0.120 (0.403)	-0.427 (0.392)
STATE H	-0.658* (0.375)	-0.496 (0.360)
OCTPLAC	+0.701** (0.339)	+0.125 (0.335)
BREPLAC	+0.263 (0.666)	+1.139* (0.656)
OJTPLAC	+0.905** (0.401)	+0.210 (0.399)
NOTPLAC	(a)	(a)
Sample Size	247	247

(a) Category omitted due to insufficient sample size.

(S.E.) = Standard Error

- * = significant at the 10 percent level.
- ** = significant at the 5 percent level.
- *** = significant at the 1 percent level.

Table D-5b

Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS, on the Probability That
AFDC/JTPA Participants Were Employed in all Four Quarters:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

Hispanics (b)

Training and Placement	First Post-Program Year	Second Post-Program Year
Placed from —		
JSA/SS	(b)	(b)
OCT	+.17**	+.03
B/R Ed	+.06	+.28*
OJT	+.22**	+.05
Not Placed	(c)	(c)
Sample Size	247	247

- (a) Based on results from Appendix Table D-5a.
(b) Reference group.
(c) Category omitted due to insufficient sample size.

- * = significant at 10 percent level.
** = significant at 5 percent level.
*** = significant at 1 percent level.

■ APPENDIX E: Results of Post-Program Poverty Threshold Models in Chapter 6

Table E-1a

Logit Model of the Likelihood That
Employed AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

White and Black High School Graduates
Between 22 and 35 Years of Age

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	-1.789*** (0.543)	-0.645 (0.513)	-1.080** (0.514)	-0.127 (0.461)
HDOFHSE	+0.502 (0.318)	+0.063 (0.288)	+0.478 (0.394)	+0.284 (0.345)
EMPENR	-0.729 (0.509)	-1.246** (0.533)	+0.056 (0.713)	-0.491 (0.711)
UNENR	-0.347 (0.261)	+0.115 (0.266)	+0.014 (0.240)	+0.026 (0.223)
AGE3134	-0.222 (0.217)	+0.145 (0.213)	+0.034 (0.227)	+0.214 (0.201)
TRMQTR1	+0.271 (0.268)	+0.140 (0.257)	-0.146 (0.270)	+0.146 (0.245)
TRMQTR3	+0.443* (0.257)	+0.389 (0.251)	-0.077 (0.270)	-0.155 (0.250)
TRMQTR4	-0.028 (0.288)	-0.120 (0.267)	-0.355 (0.264)	-0.357 (0.246)

Table E-1a (continued)

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
UEMPLT7	+0.349* (0.208)	+0.352* (0.199)	+0.382* (0.229)	-0.028 (0.202)
AWAGLT5K	+0.147 (0.244)	-0.291 (0.228)	-0.615*** (0.232)	-0.178 (0.219)
STATES 1	-0.269 (0.270)	-0.204 (0.252)	-0.387* (0.290)	-0.629** (0.271)
STATES 2	+0.084 (0.289)	-0.026 (0.293)	-0.240 (0.311)	-0.750*** (0.288)
OCTPLAC	+0.772*** (0.293)	+0.524** (0.268)	+0.143 (0.269)	+0.097 (0.243)
BREPLAC	+0.858 (0.644)	+0.721 (0.516)	+0.872* (0.522)	+0.186 (0.521)
OJTPLAC	+0.626** (0.325)	+0.658** (0.300)	+0.392 (0.323)	+0.432 (0.300)
NOTPLAC	-0.775 (0.809)	-0.945** (0.425)	+0.120 (0.405)	+0.037 (0.318)
Sample Size	535	521	555	563

(a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year.

(S.E.) = Standard Error

- * = significant at the 10 percent level.
- ** = significant at the 5 percent level.
- *** = significant at the 1 percent level.

Table E-1b

Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS, on the Probability
That Employed AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

White and Black High School Graduates
Between 22 and 35 Years of Age

Training and Placement	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
Placed from —				
JSA/SS	(b)	(b)	(b)	(b)
OCT	+.16***	+.13**	+.03	+.02
B/R Ed	+.18	+.18	+.17*	+.04
OJT	+.13**	+.16**	+.08	+.10
Not Placed	-.16	-.23**	+.02	+.01
Sample Size	535	521	555	563

(a) The AFDC/JTPA participants were employed in all four quarters of the relevant program year. Results based on Appendix Table E-1a.

(b) Reference group.

- * = significant at the 10 percent level.
- ** = significant at the 5 percent level.
- *** = significant at the 1 percent level.

Table E-2a

Logit Model of the Likelihood That
Employed AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

**White and Black School Dropouts
Between 22 and 35 Years of Age**

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	-2.369*** (0.871)	-0.778 (0.783)	-1.192 (1.228)	-0.187 (0.713)
HDOFHSE	-0.696* (0.423)	-0.394 (0.393)	+1.283 (1.108)	+0.261 (0.547)
EMPENR	-0.254 (1.175)	-0.147 (0.785)	-0.124 (1.262)	-0.303 (0.339)
UNENR	+0.440 (0.414)	-0.159 (0.366)	-0.522 (0.465)	(b)
AGE3134	-0.552 (0.388)	+0.105 (0.337)	-0.371 (0.431)	-0.001 (0.311)
TRMQTR1	+1.412*** (0.447)	+0.700* (0.424)	-0.237 (0.516)	-0.159 (0.408)
TRMQTR3	+1.054** (0.448)	+0.445 (0.389)	-1.499** (0.709)	-0.340 (0.423)
TRMQTR4	+1.063** (0.460)	+0.377 (0.403)	-0.567 (0.503)	-0.104 (0.381)
UEMPLT7	-0.254 (0.342)	+0.057 (0.306)	-1.066** (0.423)	-0.029 (0.321)
AWAGLT5K	-1.042** (0.463)	-1.182*** (0.440)	-0.100 (0.566)	-0.799 (0.381)**
STATES 1	+0.801 (0.519)	+0.476 (0.494)	-1.789*** (0.618)	-1.333*** (0.481)
STATES 2	+1.005* (0.580)	+1.391*** (0.525)	-1.607** (0.637)	-0.735 (0.486)

Table E-2a (continued)

Variable	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
OCTPLAC	+1.088* (0.587)	+0.407 (0.489)	+0.583 (0.537)	+0.429 (0.365)
BREPLAC	+1.316* (0.704)	+0.396 (0.679)	-0.233 (1.176)	+1.011 (0.660)
OJTPLAC	+0.939* (0.576)	+0.519 (0.477)	+1.850*** (0.574)	+1.077*** (0.399)
NOTPLAC	+0.095 (0.834)	-0.782 (0.634)	(c)	(c)
Sample Size	282	259	293	321

- (a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year.
 (b) Due to small sample size the variables EMPENR and UNENR were replaced with EMPUNENR.
 (c) Category omitted due to insufficient sample size.

(S.E.) = Standard Error.

- * = significant at the 10 percent level.
 ** = significant at the 5 percent level.
 *** = significant at the 1 percent level.

Table E-2b

Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS, on the Probability
That Employed AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

White and Black School Dropouts
Between 22 and 35 Years of Age

Training and Placement	White		Black	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
Placed from — JSA/SS	(b)	(b)	(b)	(b)
OCT	+.16*	+.08	+.04	+.07
B/R Ed	+.20*	+.08	+.02	+.16
OJT	+.14*	+.10	+.13***	+.17***
Not Placed	+.01	-.16	(c)	(c)
Sample Size	282	259	293	321

- (a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year. Based on results from Appendix Table E-2a.
 (b) Reference group.
 (c) Category omitted due to insufficient sample size.

* = significant at the 10 percent level.
 ** = significant at the 5 percent level.
 *** = significant at the 1 percent level.

Table E-3a

Logit Model of the Likelihood That
Employed AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

High School Graduates and School Dropouts
36 Years of Age or Older

Variable	Graduates		Dropouts	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	+0.041 (0.734)	-1.015 (0.680)	-2.185* (1.190)	-0.189 (0.961)
HDOFHSE	+0.885* (0.480)	+1.109*** (0.419)	-0.290 (0.568)	-0.094 (0.472)
EMPENR	-0.352 (0.758)	-0.084 (0.688)	-0.041 (1.245)	-0.843 (1.254)
UNENR	-0.440 (0.397)	-0.089 (0.362)	+0.019 (0.594)	-0.655 (0.508)
AGEGT40	-0.189 (0.318)	+0.259 (0.280)	+0.221 (0.473)	+0.127 (0.380)
BLACK	-0.344 (0.329)	-0.685** (0.298)	-0.156 (0.482)	-0.701* (0.399)
TRMQTR1	-0.396 (0.391)	+0.131 (0.378)	+1.171* (0.651)	-0.140 (0.557)
TRMQTR3	-0.418 (0.412)	-0.397 (0.388)	+0.601 (0.673)	-0.698 (0.549)
TRMQTR4	-0.276 (0.401)	-0.061 (0.348)	+0.622 (0.678)	-0.123 (0.491)
UEMPLT7	-0.402 (0.328)	-0.097 (0.291)	+0.284 (0.521)	+0.502 (0.403)
AWAGLT5K	-0.868** (0.341)	-0.542* (0.306)	+0.224 (0.616)	+0.431 (0.512)
STATES 1	-0.273 (0.408)	-0.269 (0.386)	-0.967 (0.725)	-0.659 (0.592)
STATES 2	+0.718 (0.443)	+0.166 (0.418)	-0.320 (0.762)	-0.298 (0.646)

Table E-3a (continued)

Variable	Graduates		Dropouts	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
OCTPLAC	+0.249 (0.390)	+1.104*** (0.375)	-0.316 (0.660)	-0.398 (0.534)
BREPLAC	+0.115 (1.356)	+0.765 (1.075)	+0.471 (0.942)	+1.185* (0.672)
OJTPLAC	-0.213 (0.432)	+0.674* (0.394)	+0.441 (0.571)	+0.738 (0.508)
NOTPLAC	-1.158 (0.746)	+0.638 (0.474)	(b)	-2.198** (1.117)
Sample Size	244	262	184	187

(a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year.

(b) Category omitted due to insufficient sample size.

(S.E.) = Standard Error

* = significant at the 10 percent level.

** = significant at the 5 percent level.

*** = significant at the 1 percent level.

Table E-3b

Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS, on the Probability
That Employed AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

**High School Graduates and School Dropouts
36 Years of Age or Older**

Training and Placement	White		Black	
	First Post- Program Year	Second Post- Program Year	First Post- Program Year	Second Post- Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
Placed from — JSA/SS	(b)	(b)	(b)	(b)
OCT	+.05	+.27***	-.03	-.07
B/R Ed	+.03	+.19	+.05	+.20*
OJT	-.05	+.17*	+.05	+.12
Not Placed	-.25	+.16	(c)	-.36**
Sample Size	244	262	184	187

- (a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year. Results based on Appendix Table E-3a.
 (b) Reference group.
 (c) Category omitted due to insufficient sample size.

- * = significant at the 10 percent level.
 ** = significant at the 5 percent level.
 *** = significant at the 1 percent level.

Table E-4a

Logit Model of the Likelihood That
Employed AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

Whites and Blacks 36 Years of Age
Or Older

Variable	Whites		Blacks	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	-0.110 (0.712)	+0.462 (0.691)	+1.091 (1.005)	-0.394 (0.824)
HDOFHSE	+0.374 (0.358)	+0.338 (0.319)	-0.241 (0.711)	+0.332 (0.585)
EMPENR	-0.731 (0.673)	-0.767 (0.612)	+0.195 (1.284)	-0.740 (1.303)
UNENR	-0.372 (0.396)	-0.441 (0.380)	-0.362 (0.483)	-0.475 (0.408)
AGEGT40	-0.244 (0.279)	+0.096 (0.262)	+0.348 (0.400)	+0.487 (0.312)
DROPOUT	-1.491*** (0.357)	-0.915*** (0.304)	-1.454*** (0.436)	-1.259*** (0.343)
TRMQTR1	-0.182 (0.382)	+0.047 (0.379)	+0.093 (0.487)	+0.238 (0.423)
TRMQTR3	+0.056 (0.372)	-0.212 (0.347)	-0.306 (0.504)	+0.111 (0.437)
TRMQTR4	+0.375 (0.354)	-0.010 (0.329)	-0.177 (0.499)	+0.456 (0.400)
UEMPLT7	-0.035 (0.295)	-0.285 (0.270)	-0.550 (0.425)	-0.165 (0.329)
AWAGLT5K	-0.571* (0.346)	-0.554* (0.331)	-0.453 (0.426)	-0.054 (0.354)
STATES 1	+0.263 (0.389)	+0.262 (0.372)	-1.242** (0.530)	-0.611 (0.450)
STATES 2	+0.902** (0.438)	+0.084 (0.414)	-0.248 (0.606)	-0.168 (0.496)

Table E-4a (continued)

Variable	Whites		Blacks	
	First Post-Program Year	Second Post-Program Year	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
OCTPLAC	+0.057 (0.340)	+0.346 (0.346)	-0.070 (0.515)	+0.562 (0.421)
BREPLAC	+0.089 (0.933)	+0.518 (0.738)	-0.021 (1.252)	+1.422** (0.716)
OJTPLAC	-0.128 (0.361)	+0.592* (0.359)	-0.350 (0.578)	+0.091 (0.474)
NOTPLAC	-2.502** (1.090)	-0.333 (0.459)	-0.610 (0.817)	-0.296 (0.523)
Sample Size	305	285	204	246

(a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year.

(S.E.) = Standard Error

- * = significant at the 10 percent level.
- ** = significant at the 5 percent level.
- *** = significant at the 1 percent level.

Table E-4b

Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS, on the Probability
That Employed AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

**Whites and Blacks
36 Years of Age or Older**

Training and Placement	White		Black	
	First Post- Program Year	Second Post- Program Year	First Post- Program Year	Second Post- Program Year
	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)	Coefficient (S.E.)
Placed from — JSA/SS	(b)	(b)	(b)	(b)
OCT	+.01	+.09	+.01	+.12
B/R Ed	+.02	+.13	+.003	+.30**
OJT	-.03	+.15*	-.06	+.02
Not Placed	-.52**	-.08	-.10	-.06
Sample Size	305	285	204	246

(a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year. Based on results from Appendix Table E-4a.

(b) Reference group.

* = significant at the 10 percent level.

** = significant at the 5 percent level.

*** = significant at the 1 percent level.

Table E-5a

Logit Model of the Likelihood That
AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years
(PY 1986 Terminees)

Hispanics

Variable	First Post-Program Year	Second Post-Program Year
	Coefficient (S.E.)	Coefficient (S.E.)
INTERCEPT	+1.154 (0.987)	+1.457 (0.942)
HDOFHSE	-0.911 (0.685)	+0.020 (0.601)
EMPUNENR	-0.905 (0.655)	-1.172* (0.700)
AGE2235	+0.233 (0.647)	+0.153 (0.682)
DROPOUT	-0.887 (0.547)	-0.660 (0.481)
LIMENGL	-1.373 (0.934)	-1.571* (0.823)
TRMQTRN2	+0.027 (0.505)	-0.176 (0.493)
UEMFLT7	+0.078 (0.564)	+1.126** (0.563)
AWAGLT5K	-0.802 (0.667)	-0.704 (0.647)
STATE H	-0.808 (0.610)	-0.498 (0.569)
OCTPLAC	+1.286** (0.617)	+0.886 (b) (0.564)
BREPLAC	+3.521** (1.458)	+0.580 (1.034)
OJTPLAC	+0.839 (0.711)	+0.205 (0.697)
NOTPLAC	(c)	(c)
Sample Size	103	111

(a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year.

(b) This coefficient was not quite significant at the 10 percent level.

(c) Category omitted due to insufficient sample size.

* = significant at 10 percent level.

** = significant at 5 percent level.

*** = significant at 1 percent level.

Table E-5b
Estimated Impact of JTPA Training and Placement,
Relative to Placement from JSA/SS, on the Probability
That Employed AFDC/JTPA Participants Were Above Poverty:
First and Second Post-Program Years (a)
(PY 1986 Terminees)

Hispanics

Training and Placement	First Post-Program Year	Second Post-Program Year
Placed from —		
JSA/SS	(b)	(b)
OCT	+.31**	+.21
B/R Ed	+.86**	+.14
OJT	+.20	+.05
Not Placed	(c)	(c)
Sample Size	103	111

- (a) The AFDC/JTPA participants were employed in all four quarters of the relevant post-program year. Based on results from Appendix Table E-5a.
(b) Reference group.
(c) Category omitted due to insufficient sample size.

- * = significant at 10 percent level.
** = significant at 5 percent level.
*** = significant at 1 percent level.

■ References

Abt Associates. *The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months*, Report prepared for the U.S. Department of Labor, Abt Associates, Bethesda, Maryland, January 1993.

_____. *The National JTPA Study, Overview: Impacts, Benefits, and Costs of Title II-A*, Report prepared for the U.S. Department of Labor, Abt Associates, Bethesda, Maryland, January 1994.

Baj, John; Trott, Charles E.; with Stevens, David. *A Feasibility Study of the Use of Unemployment Insurance Wage-Record Data as an Evaluation Tool for JTPA: Phase I*, Research Report Number 90-02, National Commission for Employment Policy, Washington, D.C., January 1991.

Besharov, Douglas J. with Fowler, Amy. "The End of Welfare as We Know It?" *The Public Interest*, Number 111, Spring 1993, pp. 95-108.

Bloom, Howard. "Accounting for No-shows in Experimental Evaluation Designs," *Evaluation Review*, Number 8, April 1984, pp. 225-246.

Bowman, William R. *Evaluating JTPA Programs for Economically Disadvantaged Adults: A Case Study of Utah and General Findings*, Research Report Number 92-02, National Commission for Employment Policy, Washington, D.C., June 1993.

Committee on Ways and Means, U.S. House of Representatives, *Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*, 1989 Edition, U.S. Government Printing Office, Washington, D.C., March 15, 1989.

Employment and Training Reporter. "Time Limits are Coming, Shalala Vows," Volume 24, Number 45, MII Publications, Inc., Washington, D.C., July 28, 1993, p. 906.

Friedlander, Daniel; Riccio, James; and Freedman, Stephen. *GAIN: Two-Year Impacts in Six Counties*, Manpower Development Research Corporation, New York, New York, May 1993.

General Accounting Office. *Job Training Partnership Act: Services and Outcomes for Participants with Differing Needs*, HRD-89-52, Washington, D.C., June 1989.

Gordon, Anne, and Burghardt, John. *The Minority Female Single Parent Demonstration: Short-Term Economic Impacts*, Mathematica Policy Research, Inc., Report under contract to The Rockefeller Foundation, The Rockefeller Foundation, New York, March 1990.

Greenberg, David and Wiseman, Michael. *What Did the Work-Welfare Demonstrations Do?*, DP #969-92, Institute for Research on Poverty, University of Wisconsin-Madison, Madison, Wisconsin, April 1992.

Gueron, Judith M. and Pauly, Edward. *From Welfare to Work*, Russell Sage Foundation, New York, New York, 1991.

Hartmann, Heidi and Spalter-Roth, Roberta. "The Real Employment Opportunities of Women Participating in AFDC: What the Market Can Provide," Paper Presented at Women and Welfare Reform: Women's Poverty, Women's Opportunities, and Women's Welfare, A Policy Conference to Break Myths and Create Solutions," Sponsored by Institute for Women's Policy Research, Washington, D.C., October 23, 1993.

Heckman, James J. "Sample Selection Bias as a Specification Error," *Econometrica*, Volume 47, January 1979, pp. 153-161.

Heckman, James J. "Randomization and Social Policy Evaluation," in *Evaluating Welfare and Training Programs*, ed. by Charles F. Manski and Irwin Garfinkel, Harvard University Press, Cambridge, Massachusetts, 1992, pp. 201-230.

_____. "Basic Knowledge — Not Black Box Evaluations," *Focus*, Volume 14, Number 1, 1992, pp. 24-25.

Heckman, James J. and Hotz, V. Joseph. "Choosing Among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case Study of Manpower Training," *Journal of the American Statistical Association*, Volume 84, Number 408, December 1989, pp. 862-880.

Hollister, Jr., Robinson G. *The Minority Female Single Parent Demonstration: New Evidence about Effective Training Strategies*, The Rockefeller Foundation, New York, New York, 1990.

Kemple, James J. and Haimson, Joshua. *Florida's Project Independence: Program Implementation, Participation Patterns, and First-Year Impacts*, Manpower Development Research Corporation, New York, New York, January 1994.

Levitan, Sar and Gallo, Frank. *Jobs for JOBS: Toward a Work-based Welfare System*, Occasional Paper 1993-1, Center for Social Policy Studies, The George Washington University, Washington, D.C., March 1993.

Moffit, Robert. "Incentive Effects of the U.S. Welfare System: A Review," *Journal of Economic Literature*, Volume XXX, March 1992, pp. 1-61.

National Commission for Employment Policy. *Training Hispanics: Implications for the JTPA System*, Special Report Number 27, National Commission for Employment Policy, Washington, D.C., January 1990.

_____. *Coordinating Federal Assistance Programs for the Economically Disadvantaged: Recommendations and Background Report*, Special Report Number 31, National Commission for Employment Policy, Washington, D.C., October 1991.

_____. *Using Unemployment Insurance Wage-Record Data for JTPA Performance Management*, Research Report Number 91-07, National Commission for Employment Policy, Washington, D.C., June 1992.

_____. *Private Industry Councils: Examining Their Mission Under the Job Training Partnership Act*, Special Report Number 35, National Commission for Employment Policy, Washington D.C., March 1993.

O'Neill, June. *Work and Welfare in Massachusetts: An Evaluation of the ET Program*, Pioneer Paper Number 3, Pioneer Institute for Public Policy Research, Boston, Massachusetts, 1990.

Romero, Carol J., Donald Cox, and Arnold Katz. *The Potential Effectiveness of the Employment Service in Serving Dislocated Workers under EDWAA: Evidence from the 1980s*, Research Report Number 91-02, National Commission for Employment Policy, Washington, D.C., October 1991.

Smith, Marcy. "DOL Performance Standards to Set Lower Employment Measure," *Employment and Training Reporter*, Volume 25, Number 26, MII Publications, Washington, D.C., March 9, 1994, p. 492.

SRI International. *Developing Effective JTPA Performance Standards Incentives Policies: A Technical Assistance Guide*, Research Report Number 89-07, National Commission for Employment Policy, Washington, D.C., March 1990.

U.S. Department of Labor. Employment and Training Administration, *Employment and Training Administration, Guide for Setting JTPA Title II-A and Title III (EDWAA) Performance Standards for PY 89*, U.S. Department of Labor, Washington, D.C., May 1989.

_____. Employment and Training Administration, *JTPA Title IIA and III Enrollments and Terminations During Program Year 1990 (July 1990-June 1991)*, U.S. Department of Labor, Washington, D.C., January 1992.

_____. Office of Strategic Planning and Development, *Job Training Quarterly Survey: JTPA Title IIA and III Enrollments and Terminations During Program Year 1988*, U.S. Department of Labor, Washington, D.C., February 1990.

_____. Office of Strategic Planning and Development, *Job Training Quarterly Survey: JTPA Title IIA and III Enrollments and Terminations During the First Three Quarters of PY 1990*, U.S. Department of Labor, Washington, D.C., September 1991.

Welfare Simplification and Coordination Advisory Committee. *Time for A Change: Remaking the Nation's Welfare System*, n.p., June 1993.